

Quantitative Reasoning Aptitude Test Hard Mode

Sr	Questions	Answers Choice
1	How many numbers between 200 and 500 are divisible by 13 ?	A. 23 B. 17 C. 15 D. 32
2	The first five multiples of 17 are:	A. 0, 1, 17, 34, 51 B. 17, 34, 51, 68, 85 C. 38, 57, 76, 95, 114 D. None of these
3	The number which is divisible by 7 but not by 14 is :	A. 21 B. 12 C. 71 D. None of these
4	The total number of even prime numbers is:	A. 0 B. 1 C. 2 D. None of these
5	The least prime number is:	A. 0 B. 1 C. 2 D. 3
6	The smallest member of set W is:	A. 0 B. 1 C. 2 D. 3
7	The smallest even number of three digits is:	A. 98 B. 102 C. 998 D. 100
8	The smallest 4-digit number using 7, 0, 8 and 9 is:	A. 0879 B. 0789 C. 0978 D. 7890
9	The cube of $\frac{1}{2}$ is:	A. $\frac{1}{4}$ B. $\frac{1}{8}$ C. $\frac{1}{2}$ D. $\frac{1}{16}$
10	$3-7 =$	A. -7 B. 7 C. -4 D. 4
11	If 1 is added to the denominator of a fraction, it becomes $\frac{1}{2}$ and if 1 is added to the numerator, the fraction becomes 1. The fraction is:	A. $\frac{4}{7}$ B. $\frac{10}{11}$ C. $\frac{2}{3}$ D. $\frac{5}{9}$
12	How many two-digit numbers are there which are divisible by 6 ?	A. 17 B. 18 C. 16 D. 15
13	A number whose fifth part increased by 5 is equal to its fourth part diminished by 5, is:	A. 160 B. 180 C. 200 D. 220
14	If $(5^a)(5^b) = 5^c/5^d$, what is d in terms of a, b and c ?	A. $a + b - c$ B. $a - b + c$ C. $a + b + c$ D. $c - a - b$
15	Which of the following is equal to $(3^8 \times 3^9)^{10}$?	A. $3^{⁷²⁰}$ B. $3^{¹⁷⁰}$ C. $3^{²⁷}$ D. $3^{⁹⁸}$

16	A neon sign flashes every 3 seconds, another sign flashes every 5 seconds, and a third flashes every 7 seconds. If they all flash together, how many seconds will pas before they all flash simultaneously again?	A. 15 seconds B. 35 seconds C. 105 seconds D. 21 seconds
17	The greatest number which exactly divides 1155 and 735 is:	A. 25 B. 5 C. 15 D. 105
18	The least number which when divided by 35, leaves remainder of 25; when divided by 45 leaves a remainder of 35 and when divided by 55 leaves 45 as remainder, is:	A. 3455 B. 3465 C. 3475 D. 10
19	The L.C.M of 12,20,24,32 is:	A. 240 B. 360 C. 480 D. 600
20	How many whole bricks $6 \times 12 \times 24 \text{ cm}^3$ will be sufficient to construct a solid cube of minimum size ?	A. 4 B. 6 C. 8 D. 12
21	If the L.C.M and H.C.F of two numbers are 150 and 30 respectively, and one of the numbers is 18, find the other number ?	A. 250 B. 180 C. 150 D. 170
22	The product of two numbers is 2500. If their L.C.M is 125, then their H.C.F is:	A. 20 B. 250 C. 125 D. None of these
23	It takes Riaz 30 minutes to mark a paper. Razi only need 25 minutes to mark a paper. If they both start marking papers at 11:00 A.M, what is the first time they will finish marking a paper at the same time?	A. 12:30 B. 12:45 C. 1:30 D. 12:25
24	Sonia buys two off-cuts of ribbon in a sale. One is 153 cm long. The other is 204 cm long. She cuts them so that she ends up with a number of pieces all the same length. What is the greatest length each piece can be ?	A. 39 B. 6 C. 17 D. 51
25	A farmer wants to fence a triangular field. He plans to put a fencing post in each corner and place other posts at equal distance along its sides. He wants the posts to be as far apart as possible. The sides of the field are 477 feet 2412 feet and 636 long. How far apart will the posts be ?	A. 18 feet B. 9 feet C. 27 feet D. 159 feet
26	Find the greatest number of 4 digits which when divided by 18,24,30 and 36 leaves a remainder 17 in each case.	A. 360 B. 9360 C. 3600 D. 9377
27	The least number which when divided by 12,15 and 18 leaves 5 as remainder in each case is:	A. 180 B. 175 C. 185 D. 125
28	The greatest number which divides 2400 and 3600 leaving 48 and 60 respectively, as remainder is:	A. 9 B. 7 C. 17 D. 10
29	Ahmed has a rectangular garden measuring 4.32m by 3.36m. He wants to divide it into square plots of equal size. What is largest sized square the can use?	A. 0.24 B. $\sqrt{3}$ C. 0.48m D. 0.16
30	The chairs in the school hall can be set out in 35 equal rows or in 45 equal rows or in 105 equal rows are:	A. 600 B. 400 C. 40 D. 80
31	What is the least positive integer which is to be added to 57592910 so that the sum may be a perfect square ?	A. 7588 B. 7 C. 11 D. 15166
32	A rectangular field which is twice as long as it is broad, has an area of 14450 m^2 , what is its perimeter ?	A. 85 m B. 510 m C. 165 m D. 170 m
33	The cost of the planting sugarcane at the rate of 6 paisa per square meter is Rs. 5840.64. What is the length of side of this square field?	A. 312 m B. 622 m C. 97344 m

	What is the length of side of the square field.	C. 313.11 m D. 459 m
34	What is the smallest number which when subtracted from 1.00060219 gives a perfect square number ?	A. 0.00210 B. 210 C. 0.00000210 D. 0.210
35	The product of 313 with itself is:	A. 97969 B. 17.69 C. 5536.97 D. 195938
36	The size of the square which can be made using 256 square shapes with a side length of 6 cm is:	A. 16 cm B. 36 cm C. 2.67 (approx) cm D. 96 cm
37	An instructor having 9224 students under him, arranges them into a square and finds 8 students to be excess. What is the number of students in the front row?	A. 97 B. 88 C. 104 D. 96
38	The difference between the first two perfect squares that end with 9 is:	A. 11 B. 40 C. 30 D. 120
39	A rectangular field which is 10 times as long as its breadth has an area of 75690 sq m. What is its perimeter ?	A. 275 m B. 2750 m C. 1914 m D. 191 m
40	A square lawn having area 0.25 sq km has to be enclosed with iron railings at the rate of Rs. 10100 per metre. What will be its cost ?	A. Rs. 20200 B. Rs. 2000 C. Rs. 202000 D. Rs. 100100
41	How many 1cm square pieces of paper can Rachael cut from a square sheet of paper with a side length of 2.1 m?	A. 22100 cm ² B. 44100 cm ² C. 27100 cm ² D. 36100 cm ²
42	If length of a rectangular field is twice that of its width. What is the perimeter of the field if its area is 1152 m ² ?	A. 256 m B. 144 m C. 24 m D. 96 m
43	The product of $\sqrt{24a}$ and $\sqrt{6a}$ is:	A. 12a B. $6a^{>2}$ C. $12a^{>2}$ D. $3a\sqrt{8}$
44	If $5/x$, $8/x$ and $13/x$ are all in lowest terms. Then how many integers, x between 30 and 40 ?	A. 5 B. 1 C. 2 D. 3
45	$6/6 \times 6/12 \times 6/18 \times 6/24 \times 6/30$ equals:	A. 1/120 B. 1/2 C. 1/30 D. 1 E. None of these
46	If $4/13$ of a number is 39, what is $8/13$ of that number ?	A. 39/4 B. 78 C. 16 D. 39/8
47	$3/4$ of 28 is equal to $30/7$ of what number ?	A. 90 B. 45 C. 30 D. 56
48	There are 20 boys in a class. Five of them are left-handed. What fraction of the class is left handed ?	A. 1/5 B. 1/2 C. 1/4 D. 2/11 E.
49	A chemical solution contains 8% of acid. If there is 15 ml of acid, what is the volume of the solution ?	A. 125.5 ml B. 187.5 ml C. 225.5 ml D. 171.5 ml
50	What fractional part of a week is 98 hours ?	A. 7/98 B. 7/12 C. 1/20 D. 1/7

51	A village has 5860 voters, of whom 7% usually forget to vote. In order to win an election, a candidate must gain at least 50% of the remaining votes. How many votes does he need in order to win ?	A. 2725 B. 410 C. 5450 D. None of these
52	What fraction is exactly midway between $\frac{1}{3}$ and $\frac{1}{4}$?	A. $\frac{7}{12}$ B. $\frac{7}{24}$ C. $\frac{29}{11}$ D. $\frac{1}{2}$
53	$\frac{4}{9}$ of a number is 12. What is the number ?	A. 27 B. 36 C. 18 D. 16
54	Ali purchased some goldfish. During the first week, $\frac{1}{5}$ of them died, and during the second week, $\frac{3}{8}$ of those still alive at the end of the first week died. What is the fraction of the original goldfish still alive after two weeks ?	A. $\frac{1}{2}$ B. $\frac{3}{2}$ C. $\frac{5}{2}$ D. $\frac{4}{3}$
55	$\frac{3}{8}$ of a number is 10. What is the number ?	A. 91 B. 81 C. 23 D. 27
56	$\frac{5}{8}$ of 24 is equal to $\frac{15}{7}$ of what number ?	A. 15 B. 105 C. 35 D. 7
57	A German class has 12 boys and 18 girls. What is the fraction of the class boys ?	A. $\frac{1}{6}$ B. $\frac{3}{5}$ C. $\frac{2}{3}$ D. $\frac{4}{15}$
58	If the base of a rectangle is increased by 40% and its altitude is decreased by 20% then its area is:	A. decreased by 20% B. increased by 12% C. decreased by 12% D. increased by 16%
59	If x% of y is 20, then y =	A. $2000 \times$ B. $\frac{100}{x}$ C. $\frac{2000}{x}$ D. $\frac{x}{200}$
60	12 is $\frac{1}{3}$ % of what number ?	A. 4 B. 400 C. 36 D. 3600
61	If p is a positive number, 400% of p is what percent of 400 p ?	A. 4 B. 25 C. 40 D. 1
62	What is 10% of 30% of 40% ?	A. 0.12% B. 0.012% C. 12% D. 1.2%
63	What percent of 75 is x ?	A. $\frac{3}{4} - x$ B. $\frac{4}{3} \times x$ C. $4 \times x$ D. $3 \times x$
64	If 35 students took an exam and 13 of failed, what percent of them passed?	A. 20% approx B. 63% approx C. 25% approx D. 22% approx
65	There are twice as many boys a girls in an economics class. If 20% of the boys and 35% of the girls have already handed over their result cards, that percent of the students have not yet handed over their cards ?	A. 75 B. 65 C. 55 D. 15
66	A dealer bought an ornamental jar for Rs. 7,000 and after some days sold it for Rs. 21,000. By what percent did the value of jar increase ?	A. 300 B. 200 C. 150 D. 20
67	On a test consisting of 60 problems, Sonia solved 75% of first 40 problems correctly. What percent of the other 20 questions does she need to solve correctly for her grade on the entire exam to be 90% ?	A. 95% B. 65% C. 85 % D. cannot achieve 90%
68	If 60% of A is 30% of B, then B is what percent of A ?	A. 300% B. 30% C. 200% D. 60%

		D. 3%
69	What percent of p is q ?	A. q/p B. p/q C. 100q/p D. 100p/q
70	What percent of 1/2 is 5/4 ?	A. 2.5 B. 1.5 C. 250 D. 150
71	In a school of 820 students, 55% are boys. The number of girls and the number of boys are:	A. 369 boys, 451 girls B. 281 boys, 539 girls C. 539 boys, 281 girls D. 451 boys, 369 girls
72	Jafer drew a square. He then erased it and drew a second square whose sides were 3 times the sides of the first square. By what percent was the area of the square increased ?	A. 300% B. 800% C. 400% D. 200%
73	In a city 90% of the population own a car, 15% own a motorcycle, and everybody owns one or the other or both. What is the percentage of motorcycle owners to who own cars ?	A. 15% B. 5% C. 75% D. 33 1/3%
74	Concrete consists of cement, sand and screenings in the ratio of 1 : 5 : 4, what is the percentage of the sand mixed ?	A. 10% B. 40% C. 50% D. 60%
75	Three business partners shares have profit of Rs. 24000 in the ratio 5 : 4 : 3. What is the amount of the least share ?	A. 6000 B. 8000 C. 10,000 D. 1200
76	A machine produces 1280 parts in 16 hours. How many parts would it make in a working week of 44 hours ?	A. 2530 B. 3520 C. 2122 D. 3960
77	If the ratio of x and y is 11/3, what is the value of 2x to y ?	A. 11/6 B. 22/6 C. 22/3 D. 11/5
78	If 80 % application to a program were rejected, what is the ratio of the number accepted to the number rejected ?	A. 1 : 4 B. 4 : 1 C. 1 : 8 D. 3 : 8
79	What is the ratio of the circumference of a circle to its radius ?	A. π B. $\pi/2$ C. $2\pi r$ D. 2π
80	Win/Loss ratio for two teams are A, 5 : 2 and B, 7 : 3 which team has the better record ?	A. A B. B C. both A and B D. wrong question
81	If 15 workers can paint a certain number of houses in 24 days, how many days will 40 workers take, working at the same rate, to do the same job ?	A. 12 days B. 18 days C. 15 days D. 9 days
82	If a jet travels 1280 km in 2 hours, how far will it travel in 5 1/2 hours, at the same speed ?	A. 2100 B. 3300 C. 2700 D. 3520
83	If the ratio of a : b is 9 : 7 then a + b is:	A. 14 B. 16 C. 63 D. not possible
84	If the ratio of boys and girls in a class is 3 : 5 and the class contains 24 students, how many additional boys would have to enroll to make the ratio of boys to girls 1 : 1 ?	A. 9 B. 15 C. 6 D. 12
85	A recipe requires 13 gram of sugar and 18 gram of flour. If only 100 gram of sugar is used, how much flour, to the nearest gram, should be used ?	A. 16 B. 13 C. 14 D. 17

A. Blue paint 15 litres, yellow paint : 25
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86	Green paint is obtained from blue and yellow paint in the ratio 3 : 5. How much of each colour is needed to make 40 litres of this green paint ?	litres B. Blue paint: 25 litres, yellow paint: 15 litres C. Blue paint: 10 litres, yellow paint: 30 litres D. Blue paint: 13 litres, yellow paint: 27 litres
87	The average of even integers from 2 to 100 inclusive is:	A. 49 B. 52 C. 51 D. 50
88	What is the average of first hundred natural numbers ?	A. 50 B. 50.5 C. 49.5 D. 100
89	What is the average of x , y and z ? If $x + y = 5$, $y + z = 8$ and $x + z = 11$.	A. $11/3$ B. $1/2$ C. $13/5$ D. 4
90	The average of five numbers is 54. If three of the numbers are 26, 28 and 30, what is the average of the other two ?	A. 91 B. 93 C. 54 D. 186
91	Which of the following is the average of $x^2 - 16$, $39 - x^2$ and $3x + 10$?	A. $x + 3$ B. $2x + 13$ C. $x + 11$ D. $x + 11/3$
92	8 students in a class obtained 60%, 3 obtained 75%, 2 obtained 80% and 7 obtained 45% in a class test. What is the average marks ?	A. 49% B. 59% C. 29% D. 51%
93	The average number of goals a team has scored in 7 matches is 8. They averaged 10 goals for the first 3 matches and they scored 5 goals in each of the next two matches. What is the average score of the last two matches ?	A. 5 goals B. 4 goals C. 6 goals D. 8 goals
94	If the mean (average) of 6 numbers is 4.5. What is the sum of the numbers ?	A. 0.75 B. 10.5 C. 12 D. 27
95	A worker is paid R rupees per hours for the first 8 hours daily. For every hour after the first 8 hours, she is paid S rupees per hour. If she works 12 hours in one day, what is her average hourly for the day ?	A. $8R + S$ B. $8R + 4S/4$ C. $12R - 8S/4$ D. $2R + S/3$
96	Asim had an average of 60 on his first four math tests. After taking the next test, his average dropped to 58. Find his recent test grade.	A. 40 B. 50 C. 48 D. 32
97	If $a + b = 8$, $b + c = 9$, and $c + a = 11$, what is the average of a , b and c ?	A. $14/3$ B. $28/3$ C. $14/6$ D. $7/3$
98	If the average of 3, 5, 10 and S is 6, what is the value of S ?	A. 4 B. 6 C. 12 D. 0
99	What is the average of 3^{10} , 3^{20} and 3^{30} ?	A. 3^{59} B. $3^9 + 3^{19} + 3^{29}$ C. 3^{57} D. $3^{11} + 3^{21} + 3^{31}$
100	If $20x + 20y = 70$, what is the average of x and y ?	A. $7/2$ B. 7 C. $7/4$ D. $4/7$
101	Which of the following is the average of $x^4 - 20$, $40 - x^4$, and $3x + 4$?	A. $x^4 - 24$ B. $x + 8$ C. $x^4 + 3x + 24$ D. $x + 24$
102	If $x = 235$ and $y = 117$, then $x^2 - y^2/x - y = ?$	A. 118 B. 100 C. 115 D. 352

103	If $x^2 - y^2 = 16$ and $x^2 + y^2 = 34$, which of the following could be the value of xy ? i. 15 ii. -15 iii. 45	A. only 1 B. only 2 C. 1 and 2 only D. 3 only
104	The average of the polynomials, $2x^2 + 5x - 6$, $5x^2 - 5x - 6$ and $30 - 7x^2$ is:	A. 14 B. 18 C. 6 D. 5
105	What is the value of $x^2 + 14x + 24$, when $x = 854$?	A. 1000 B. 100,000 C. 741,296 D. 742,398
106	If $x^2 + y^2 = 9$ and $(x - y)^2 = 3$, what is the value of xy ?	A. 16 B. 9 C. 6 D. 3
107	The value of $(5x + 6)(x + 12) - (5x - 6)(x + 3)$ is:	A. $2(5x + 9)$ B. 14 C. 4 D. 22
108	If $1/x + 1/y = 1/z$ and $xy = z$, what is the average of x and y ?	A. $1/2$ B. 1 C. $(x + y + z)/3$ D. $(x + y + z)/2$
109	If $p^2 - q^2 = 48$ and $p - q = 12$, what is the average of p and q ?	A. 4 B. 6 C. 2 D. 12
110	If $x < 0$, then $-3x^2$ is:	A. less than $(-3x)^2$ B. greater than $(-3x)^2$ C. equal to $(-3x)^2$ D. greater than or equal to $(-3x)^2$
111	If $x > y$, then $(x - y)(x + y)$ is :	A. equal to $(x - y)(x + y)$ B. less than $(x - y)(x + y)$ C. greater than $(x - y)(x + y)$ D. options A and C
112	If $a = -5$ and $b = 3$ then $-a^2 b^3$ is:	A. less than 0 B. equal to 0 C. greater than 0 D. options B and C
113	$(a + b)(a - b) =$	A. $a(a - b) - b(a - b)$ B. $a(b - a) + b(a - b)$ C. $a(a + b) - b(b + a)$ D. $a(a - b) + b(b - a)$
114	$3x^2 - 27/x - 3$ and $(x > 0)$, is:	A. less than $2x + 9$ B. equal to $2x + 9$ C. greater than $2x + 9$ D. cannot find
115	If $3x + 9 = 18$, what is the value of $x + 3$?	A. 3 B. 6 C. -3 D. 36
116	If $5x + 12 = 44$, what is the value of $5x - 12$?	A. 24 B. 32 C. 20 D. 22
117	If $3x + 17 = 9 - x$, what is the value of x ?	A. 2 B. 3 C. -2 D. -3
118	If $x - 5 = 9$, what is the value of $x^2 - 5$?	A. 196 B. 191 C. 16 D. 11

119	If $a - b = c - dt$, what is the value of t in terms of a, b, c and d ?	A. $b - c/a - d$ B. a/b C. c/d D. $b + c/a + d$
120	If $\frac{1}{2}x + \frac{1}{4}x + \frac{1}{8}x = 22$, what is the value of x ?	A. 88 B. 44 C. 1 D. 24
121	If $2x - 3 = 15$, what is the value of $(2x - 3)^2$?	A. 81 B. 227 C. ± 225 D. 225
122	If $81^{10} = 3^{x-7}$, what is the value of x ?	A. 47 B. 27 C. 51 D. 14
123	If $1/x - y = 7$, then $x =$	A. $\frac{1}{7x} + \frac{1}{7}$ B. $\frac{1}{7x} - \frac{1}{7}$ C. $\frac{1}{7} - \frac{1}{x}$ D. $\frac{1}{7x} - \frac{1}{7}$
124	If x is a positive number and $x^2 + 36 = 100$, what is the value of x ?	A. 6 B. 8 C. 14 D. 64
125	If $4^{x+5} = 8^{x-1}$, what is the value of x ?	A. $\frac{3}{5}$ B. $-\frac{5}{3}$ C. $-\frac{3}{5}$ D. 4
126	If x and y are positive integers and $x^2 + 2y^2 = 41$, $2x^2 + y^2 = 34$, then $x^2 =$	A. 6 B. 8 C. 75 D. 9
127	If $xy > 0$ and $x < 0$, which of the following is negative ?	A. $-x$ B. $-y$ C. y D. xy
128	If $a > 0$, $b > 0$ and $a - b < 0$, then ?	A. $a < b$ B. $a + b < 0$ C. $a > b$ D. $b - a < 0$
129	If $a + b > 7$ and $a - b > 5$, then which of the following gives all possible values of a and only possible value of a ?	A. $a > 6$ B. $a < 5$ C. $a > 4$ D. $a < 7$
130	If $A > B$ and $C < 0$, then which of the following is not true ?	A. $AC < BC$ B. $A + C > B + C$ C. $A - C < B - C$ D. All of the above
131	If $a = 1$ and $1 > b > 0$, then which of the following statement is true ?	A. $a = b$ B. $b > a$ C. $\frac{1}{b} > a$ D. $\frac{1}{a} < b$
132	If $a < c$ and $a < b$, assume $a \geq 0$ then which of the following statements are always true ? i. $b < c$ ii. $a < bc$ iii. $2a < b + c$	A. only 1 B. only 2 C. only 3 D. 1 and 2
133	If $6 - a > 7$, then	A. $a > 1$ B. $a > -1$ C. $a < -1$ D. $a < 1$
134	a has to be a whole number such that $0 \leq a \leq 10$. The solution for $a < 4$ and $a \geq 6$ is:	A. 5 B. 7 C. 3 D. no solution
135	If $5x > 2$ and $\frac{12}{2}x \leq 4$, list all the possible integral values of x ?	A. 2, 3, 4, 5, 6 B. 1, 2, 3, 4, 5, 6, 7, 8 C. 2, 3 D. 1
		A. 1

136	The solution of the inequality $-1 < 5x - 6 \leq 4$ in whole number is	B. 2 C. 4 D. 5
137	In inequality $y > 3x - 2$ if $a > b$, then which of the following statement is true ?	A. $x = 1$ B. $x \geq 1$ C. $x \leq 1$ D. $x \geq 1$
138	If $a/2 - 2 > a/3$, then which of the following statement is true ?	A. $a \leq 12$ B. $a \geq 12$ C. $a = 12$ D. $a \geq 12$
139	Which of the following inequalities is the solution of the inequality $7a - 5 \leq 2a + 18$?	A. $a \leq 23$ B. $a \geq 13$ C. $a \leq 23$ D. $a \geq 13$
140	For which values of p is $p^2 - 5p + 6$ negative ?	A. $p \leq 0$ B. $2 \leq p \leq 3$ C. $x \geq 3$ D. $x \leq 2$
141	If 5 is subtracted from a certain number, the result is 7 less than twice the number. What is the number ?	A. 2 B. $1/2$ C. 5 D. 6
142	Three times the first of three consecutive odd integers is 3 more than twice the third. What is the third integer ?	A. 11 B. 12 C. 15 D. 13
143	Two-fifth of a certain number is 30. What is the number ?	A. 75 B. 25 C. 90 D. 150
144	Saira weights 25 pounds more than Umbar. If together they weigh 205 pounds, what is the weight of Saira ?	A. 90 B. 105 C. 115 D. 135
145	If the sum of two numbers is 36, and the larger is three times as larger as the smaller, what is the larger number ?	A. 27 B. 30 C. 15 D. 18
146	The sum of integers p and q is 352. The units digits of p is 0. If p is divided by 10, the result is equal to q, what is the value of p ?	A. 30 B. 230 C. 320 D. 32
147	A soap factory has 30 packers. Each packer can load $1/8$ of a box in 9 minutes. How many boxes can be loaded in $1 \frac{1}{2}$ hours by all 20 packers ?	A. 28 B. $37 \frac{1}{2}$ C. 35 D. $35 \frac{1}{2}$
148	Uzma is 15 years old. Asma is one third older then Uzma. How many years ago when Asma was twice as old as Uzma is ?	A. 5 B. 12 C. 15 D. 10
149	Mohin is now three times Mohsin age. Four years from now Mohin will be y years old. In terms of y, how old will Mohsin be ?	A. $x - 4/3$ B. $x + 4/3$ C. $x + 4$ D. $x - 4$
150	If the sum of one third of a number and twice the same number is 28, the number is:	A. 10 B. 12 C. 28 D. 14
151	A man present age is x years. If his age in 8 years will be $4/5$ of what it will be in 20 years, then his present age is:	A. 45 B. 25 C. 30 D. 40
152	When 42 is added to twice a number, the result is 346, the number is:	A. 304 B. 242 C. 152 D. 265
153	A man was 26 years old when his daughter was born. Now, he is three times as old as his daughter. How many years old is the daughter now ?	A. 13 years B. 22 years C. 15 years D. 12 years

154	13 Years ago Shabbir mother was 7 times as old as he was. She is now 48 years old. How many years old is Shabbir now ?	A. 28 B. 18 C. 38 D. 20
155	If 5 years are added to a man present age and that age is tripled, he will be 84. What is his present age ?	A. 18 B. 23 C. 32 D. 54
156	Question Image	A. 30 B. 45 C. 40 D. 35
157	Question Image	A. 200 B. 220 C. 210 D. 190
158	Question Image	A. = B. < C. > D. +
159	Question Image	A. 45 B. 36 C. 46 D. 35
160	Question Image	A. 7 B. 15 C. 25 D. 35
161	Question Image	A. $x + y = 180$ B. $x - y = 180$ C. $180 \leq x + y \leq 270$ D. Insufficient information
162	Question Image	A. 70 B. 45 C. 40 D. 65
163	Question Image	A. x only B. y only C. x and y only D. y and z only
164	Question Image	A. 50 B. 30 C. 45 D. 40
165	Question Image	A. 89 B. 90.9 C. 89.9 D. 105
166	Question Image	A. 70 B. 60 C. 75 D. 65
167	Question Image	A. 80 B. 110 C. 100 D. 95
168	Question Image	A. 20 B. 70 C. 100 D. 110
169	Question Image	A. 100 B. 60 C. 80 D. 40
170	Question Image	A. 35 B. 45 C. 55 D. 40
171	The area of an equilateral triangle whose altitude is 10, is:	A. $8\sqrt{3}$ B. $2\sqrt{3}$

		C. $96\sqrt{3}$ D. $4\sqrt{3}$ A. $100\sqrt{3}$ B. $60\sqrt{3}$ C. $30\sqrt{3}$ D. $110\sqrt{3}$
172	Question Image	
173	What is the area of the triangle AEC , in the above figure 1 ?	A. 12 B. 49 C. 14 D. 21
174	What is the perimeter of $\triangle CEA$, in the figure 1 ?	A. 16 B. 25 C. 17 D. $2 + 7\sqrt{5} + \sqrt{277}$
175	In figure 2, what is the area of $\triangle BED$?	A. 16 B. 14 C. 12 D. 6
176	In figure 2, what is the perimeter of $\triangle BED$?	A. $3 + \sqrt{93}$ B. 11 C. $11 + \sqrt{97}$ D. 81
177	Question Image	A. $3 + 4\sqrt{3}$ B. $18(3 + 4\sqrt{3})$ C. 54 D. $84\sqrt{3}$
178	Question Image	A. 54 B. 72 C. $4 + \sqrt{3}$ D. $12(4 + \sqrt{3})$
179	Question Image	A. $p = 180 + q$ B. $q = 30 + p$ C. $p = 90 + q$ D. $p = 60 - q$
180	Question Image	A. $2(2 + \sqrt{2})$ B. $4 + \sqrt{2}$ C. $2 + \sqrt{2}$ D. 4
181	Question Image	A. 2 B. 4 C. $2\sqrt{2}$ D. $4\sqrt{2}$
182	Question Image	A. 60 B. 40 C. 24 D. 36
183	The length of a rectangle is twice its width. If the perimeter of a rectangle is the same as the perimeter of a square of size 9, what is the length of a diagonal of the rectangle ?	A. 180 B. $3\sqrt{5}$ C. 36 D. $6\sqrt{5}$
184	Question Image	A. 120 B. 60 C. 90 D. 30
185	A triangle has sides, 5 inches, 12 inches and 13 inches, respectively, A rectangle equal in area to that of the triangle has width of 4 inches. The perimeter of the rectangle, expressed in inches, is:	A. 23 B. 28 C. 60 D. 32
186	Question Image	A. $2 + \sqrt{2}$ B. $4 + \sqrt{2}$ C. $4(1 + \sqrt{2})$ D. $16(1 + \sqrt{2})$
187	If the length of a rectangle is 4 times its width, and if its area is 196, what is its perimeter ?	A. 60 B. 28 C. 35 D. 70
188	If the angles of a hexagon are in the ratio 2 : 4 : 4 : 4 : 5 : 5, what is the degree measure of the smallest angle ?	A. 30 B. 60 C. 40 D. 70
		A. $3\sqrt{3}$

189	Question Image	B. $36\sqrt{3}$ C. 81 D. $81\sqrt{3}$
190	Question Image	A. $81 + 81\sqrt{3}$ B. $18 + 18\sqrt{3}$ C. $12(1 + 2\sqrt{3})$ D. $12 + 12\sqrt{3}$
191	The length of a rectangle is 3 more than the side of a square, and the width of the rectangle is 3 less than the side of the square. If the area of the square is 58, what is the area of the rectangle ?	A. 40 B. 20 C. 39 D. 49
192	Question Image	A. 20 B. 40 C. 60 D. 30
193	Question Image	A. 20 B. 24 C. 40 D. 96
194	Question Image	A. $2 + 3\sqrt{2}$ B. 8 C. $4 + 6\sqrt{2}$ D. $3 + 2\sqrt{2}$
195	Question Image	A. 4 B. 4.5 C. 6 D. 1.5
196	Question Image	A. Area of $\triangle POR$ > Area of $\triangle ORS$ B. Area of $\triangle POR$ = Area of $\triangle ORS$ C. Area of $\triangle ORS$ > Area of $\triangle POR$ D. $\triangle POR \cong \triangle ORS$
197	If the area of a circle is 81π , then its circumference is:	A. 61π B. 20π C. 18π D. 16π
198	If circumference of a circle is 3π , then its area is:	A. $7\pi/2$ B. $9\pi^2$ C. $4\pi^2$ D. $9\pi/4$
199	If a circle is inscribed in a square of area 4, then the area of the circle is:	A. π B. $\pi/2$ C. $\pi/4$ D. $3\pi/4$
200	If a square of area 3 is inscribed in a circle, then the area of the circle is:	A. $9/4 \pi$ B. $9\pi^2$ C. 3π D. $\sqrt{3} \pi$
201	Question Image	A. 2.6π B. 5.5π C. 7.6π D. $1/2\pi$
202	Question Image	A. 49 B. 39 C. 59 D. 69
203	Question Image	A. 22.9π B. 22.4π C. 60π D. 62.3π
204	If P represents the area and W represents the circumference of the circle, then P in terms of W is:	A. $2\pi/W$ B. $4\pi^2/W$ C. $2\pi^2/W^2$ D. $W^2/4\pi$
205	What is the area of a circle whose radius is the diagonal of square whose area is 9?	A. $\sqrt{3}\pi$ B. 12π C. 4π D. 13π
		A. $4/\pi$...

206	Question Image	B. 1/1 C. 2/3 D. 1/2
207	If C is the circumference of a circle of radius r, then which of the following statement is true ?	A. $C/r < 6$ B. $C/r = 6$ C. $C/r > 6$ D. $C/r = \pi$
208	If C is the circumference of a circular disk in centimeters, and A is the area of the same circular disk in square centimeter. Then $C/A = A/C$, iff $r =$	A. 1 B. 2 C. 3 D. 4
209	Question Image	A. 256 B. 64π C. 256π D. $64(4 - \pi)$
210	Question Image	A. 144 B. 169 C. 100 D. 64
211	The surface area of sphere of radius $3\frac{1}{2}$ cm is:	A. 130 sq.cm B. 69 sq.cm C. 154 sq.cm D. 98 sq.cm
212	Question Image	A. 125 sq.cm B. 132 sq.cm C. 139 sq.cm D. 97 sq.cm
213	Question Image	A. 16 sq.cm B. 15 sq.cm C. 60 sq.cm D. None of these
214	The height of a triangle of base 3 cm and area 9 cm^2 is:	A. 6 cm B. 9 cm C. 18 cm D. 22 cm
215	Question Image	A. 33π B. 24π C. 25π D. 11π
Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in. A. If the quantity in column A is greater. B. If the quantity in column B is greater. C. If the two quantities are equal. D. If the relationship cannot be determined from the information given.		
216	Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B. Column A Q1. The product of the odd integers between -8 and 8. Column B Q1. The product of the even integers between -9 and 9.	A. A B. B C. C D. D
217	Question Image	A. 125 sq.cm B. 150.72 sq.cm C. 64 sq.cm D. 56 sq.cm
218	Question Image	A. 54 cm^2 B. 24 cm^2 C. 96 cm^2 D. 59 cm^2
219	Question Image	A. $\pi(r^2 - R^2)$ B. $\pi R^2 + \pi R^2$ C. $\pi(r^2 + R^2)(R - r)$ D. $\pi(R + r)(R - r)$
220	The area of the sector which contains an angle of 60° of circle of radius 7 cm, is:	A. $25\frac{2}{3}\text{ cm}^2$ B. $27\frac{2}{3}\text{ cm}^2$ C. 41 cm^2 D. $\sqrt{3}\frac{5}{28}\text{ cm}^2$

221	Question Image	A. 6 B. 49 C. 8 D. Not possible
222	Question Image	A. 12 cm^2 B. 25 cm^2 C. 9 cm^2 D. 17.23 cm^2
223	Question Image	A. $28 - 2x$ B. $4(14 - 4x)$ C. $48 - 3x$ D. $7(6 - 3x)$
224	If the radius of the circle is decreased by 20%, what happens the area ?	A. 10% increase B. 20% decrease C. 80% increase D. 36% decrease
225	A square, with perimeter 16, is inscribed in a circle, what is the area of the circle ?	A. 3π B. $2\sqrt{2}\pi$ C. 32π D. 8π
226	Question Image	A. 2535 cm^2 B. 2720 cm^2 C. 3348 cm^2 D. 628 cm^2
227	The surface area of a cube is 180, its volume is:	A. 125 B. 30 C. 164 D. $30\sqrt{30}$
228	The volume of a cube is 216, its surface area is:	A. 64 B. 216 C. 25 D. 96
229	A solid metal cube of side 5 inches is placed in a rectangular tank whose length, breadth and height are 5, 6 and 7 inches, respectively. What is the volume in cubic units, of water that the tank can now hold ?	A. 210 cubic inches B. 85 cubic inches C. 125 cubic inches D. 216 cubic inches
230	A cylinder and the cube have the same volume, if the height, h, of that cylinder is equal to the edge e of the cube, the radius of the cylinder is:	A. $\sqrt{\pi}/h$ B. π/h C. $h/\sqrt{\pi}$ D. $2\pi/h$
231	If the height of a cylinder is double to its circumference, what is the volume of the cylinder in terms of its circumference, C ?	A. C/π B. C^3/π C. $C^3/4\pi$ D. $C^3/2\pi$
232	Fatima and Maryium each roll a sheet of 9×18 paper to form a cylinder. Fatima tapes the two 9-inch edge together and Maryium tapes the two 18-inch edge together. Refer to this question and tell which of the following statement is true ?	A. The volume of Fatima cylinder is greater than Maryium cylinder B. The volume of Fatima cylinder is less than Maryium cylinder C. The volume of Fatima cylinder is equal to the Maryium cylinder D. Both cylinders have the same circumference
233	Question Image	A. Volume of the cube is less than the volume of the box B. Volume of the cube is greater than the volume of box C. Volume of the cube is equal to the volume of box D. The surface area of both cube and box are equal
234	If A(-2, 3) and B(5, -1) are the endpoints of one side of a square ABCD, what is the area of the square ?	A. 20 B. 65 C. 30 D. 35

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

235	Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.	A. A B. B C. C D. D
	Column A $x + y$ Column B xy (x and y are nonzero integers)	
236	If A(3, 2) and B(7, 2) are two vertices of a rectangle, which of the following could not be the another vertices of that rectangle ?	A. (3, 7) B. (7, 3) C. (3, -7) D. (-3, 7)
237	Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in. A. If the quantity in column A is greater. B. If the quantity in column B is greater. C. If the two quantities are equal. D. If the relationship cannot be determined from the information given. Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B. Column A The remainder when a positive integer is divided by 5. Column B 5	A. A B. B C. C D. D
238	A circle whose center is at (3, 4) passes through the origin. Which of the following points is not on the circle ?	A. (-1, 3) B. (-1, 1) C. (0, 0) D. (7, 7)
239	If a line passes through the points (x, y) and (1/x, y), then its slope is	A. $\frac{1}{x}$ B. 0 C. $1 - x^2$ D. 1
240	The slope of the line passing through (-b, b) and (3b, a) is 1 and $b \neq 0$, which of the following is an expression for a in terms of b ?	A. $\frac{1}{4b}$ B. 3b C. 5b D. 2b E. 4b
241	What is the area of the parallelogram ABCD ?	A. 24 B. 21 C. 29 D. 28
242	What is the perimeter of parallelogram ABCD ?	A. $14 + \sqrt{17}$ B. $16 + \sqrt{7}$ C. $2 + \sqrt{17}$ D. $2(7 + \sqrt{17})$
243	Ayesha completed questions 4 - 18 of a mathematics exercise in 30 minutes. At this rate, how long, in minutes, will it take her to complete questions 27 - 55 ?	A. 59 B. 29 C. 30 D. 58
244	Munir was born on August 14, 1934 and died on February 28, 1999. What was his age, in years, at the time of his death ?	A. 64 B. 65 C. 66 D. 68
245	How many three-digit number have only even digits ?	A. 48 B. 58 C. 500 D. 300
246	There are 28 players in a college cricket team. What is the probability that at least 3 of them have their birthday in the same month ?	A. 0 B. $\frac{1}{5}$ C. $\frac{1}{2}$ D. $\frac{1}{2}$

Direction: In the following type of question each consists of two quantities, one in column A and one in

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
 B. If the quantity in column B is greater.
 C. If the two quantities are equal.
 D. If the relationship cannot be determined from the information given.

247

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
 B. B
 C. C
 D. D

Column A

$$9^2$$

Column B

$$3^4$$

$$(8^{2a} = 4^{3b})$$

248

A bag has 7 marbles, one of each of colours, green, blue, brown, yellow, red, white and pink. If 6 marbles are removed from the bag, what is the probability that the red one was removed ?

- A. $\frac{1}{7}$
 B. $\frac{4}{3}$
 C. $\frac{2}{7}$
 D. $\frac{6}{7}$

249

A bag contains 20 marbles: 6 green, 10 brown, and 4 white. If one marble is removed randomly, what is the minimum number that must be removed to be certain that you have at least 2 marbles of each colour

- A. 16
 B. 18
 C. 10
 D. 15

250

In a squash tournament that has 75 entrants, a player is eliminated whenever he loses a match. How many matches will be played in the entire tournament ?

- A. 74
 B. 18
 C. 34
 D. 36

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
 B. If the quantity in column B is greater.
 C. If the two quantities are equal.
 D. If the relationship cannot be determined from the information given.

251

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
 B. B
 C. C
 D. D

Column A

$$a$$

Column B

$$b$$

$$(82a = 43b)$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
 B. If the quantity in column B is greater.
 C. If the two quantities are equal.
 D. If the relationship cannot be determined from the information given.

252

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
 B. B
 C. C
 D. D

Column A

$$27 \div 9 \times 3$$

Column B

$$7$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
 B. If the quantity in column B is greater.

- B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

A. A
 B. B
 C. C
 D. D

253

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$3x - 19/3$$

Column B

$$x - 19$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

254

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

A. A
 B. B
 C. C
 D. D

Column A

$$(-12)^n$$

Column B

$$(-12)^{n+1}$$

(n is a positive integer)

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

255

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

A. A
 B. B
 C. C
 D. D

Column A

$$x^4 x^5$$

Column B

$$(x^3)^2$$

(x > 0)

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

256

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

A. A
 B. B
 C. C
 D. D

Column A

The number of primes between 40 and 50.

Column B

The number of primes between 60 and 70

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

257

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The number of primes that are divisible by 2.

Column B

The number of primes that are divisible by 5.

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

258

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

P

Column B

0

(pq = 0)

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

259

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

a + b

Column B

15

(a and b are positive integers $ab = 21$)

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

260

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

pq

Column B

Column B

1

$(p + q = 1)$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

- A. A
- B. B
- C. C
- D. D

261

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A $\frac{4}{7}$ of x **Column B**

0

$(\frac{2}{5} \text{ of } x \text{ equals } \frac{5}{4} \text{ of } x)$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

- A. A
- B. B
- C. C
- D. D

262

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column AValue of x when $N = 1$ **Column B**Value of x when $N = 3$

$(x = 3^{N/N})$

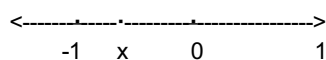
Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

- A. A
- B. B
- C. C
- D. D

263

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A $4x$ **Column B** x^4 

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

- A. A

264

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

~ ~
B. B
C. C
D. D

Column A y/x **Column B** $x/y - 1$ $x = 2y$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

265

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

A. A
B. B
C. C
D. D

Column A ac **Column B** Bc $Abc = 0$ $a > b$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

266

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

A. A
B. B
C. C
D. D

Column A x **Column B**

5

 $1/x = 5$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

267

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

A. A
B. B
C. C
D. D

Column A

 $7 \times 7 \times 7 \times 7$ **Column B** 7^4

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

268

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
 B. B
 C. C
 D. D

Column A

$$(2)^N$$

Column B

$$(-2)^{N+1}$$

N is a positive integer

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

269

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
 B. B
 C. C
 D. D

Column A

$$2^{5-1}$$

Column B

$$2^5 - 1$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

270

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
 B. B
 C. C
 D. D

Column A

$$(3^0)(9^1)$$

Column B

$$27$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

271

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
 B. B
 C. C
 D. D

Column A

$$Y^x$$

Column B

$$X^x$$

$$x > 1$$

$$x \neq y$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

272

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
- B. B
- C. C
- D. D

Column A

The product of the integers

Column B

The average of the integers

The sum of 5 consecutive integer is 0

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

273

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
- B. B
- C. C
- D. D

Column A

0

Column B

p

$1/p < 1$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

274

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
- B. B
- C. C
- D. D

Column A

$1 - a/b$

Column B

$b - a/b$

$b \neq 0$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

- A. A

- 275 Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.
- B. B
C. C
D. D

Column A

$\frac{a}{b}$

Column B

$\frac{a}{b}$

$$a = -\frac{2}{3} \text{ and } b = \frac{3}{5}$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- 276 Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.
- A. A
B. B
C. C
D. D

Column A

$\frac{17}{1/17}$

Column B

1

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- 277 Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.
- A. A
B. B
C. C
D. D

Column A

$\frac{13}{14}$ of $\frac{15}{16}$

Column B

$\frac{16}{17}$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- 278 Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.
- A. A
B. B
C. C
D. D

Column A

$5 \nabla 4$

Column B

$\frac{1}{2} \nabla \frac{2}{5}$

$$x \nabla y = \frac{x}{y} + \frac{y}{x}$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.

- B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

A. A
 B. B
 C. C
 D. D

279

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$p + .5$$

Column B

$$2p/4 + 1$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

A. A
 B. B
 C. C
 D. D

280

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The value of $x * y$ when $x = 1/2$ and $y = 1/3$

Column B

$$-1$$

$$x * y = 1/x - 1/y$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

A. A
 B. B
 C. C
 D. D

281

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$4x/3$$

Column B

$$Y$$

$$x/y = 3/4$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
 B.If the quantity in column B is greater.
 C.If the two quantities are equal.
 D.If the relationship cannot be determined from the information given.

A. A
 B. B
 C. C
 D. D

282

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$y/x$$

Column B

$$x/y - 1$$

$$x = 2y$$

Direction: In the following type of question each consists of two quantities one in

Direction:In the following type of question,each consists of two quantities,one in column A and one in column B.You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

283

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$100/4^{100}$$

Column B

$$100/4^{100}$$

Direction:In the following type of question,each consists of two quantities,one in column A and one in column B.You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

284

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$x/y$$

Column B

$$y/x$$

$$x = 1/3 \text{ and } y = 1/4$$

Direction:In the following type of question,each consists of two quantities,one in column A and one in column B.You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

285

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$(2/7)^2$$

Column B

$$\sqrt{2/7}$$

Direction:In the following type of question,each consists of two quantities,one in column A and one in column B.You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

286

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$3/13 \text{ of } 45$$

Column B

$$45/13 \text{ of } 3$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

287

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
- B. B
- C. C
- D. D

Column A

x

Column B

y

x and y are positive

$$1/x = 1 + 1/y$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

288

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
- B. B
- C. C
- D. D

Column A

x

Column B

$$(11/13)^5$$

$$x^5 = 11/13$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

289

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
- B. B
- C. C
- D. D

Column A

$$1/\sqrt{5}$$

Column B

$$\sqrt{5}/5$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
- B. If the quantity in column B is greater.
- C. If the two quantities are equal.
- D. If the relationship cannot be determined from the information given.

290

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

- A. A
- B. B
- C. C
- D. D

columns represents the same thing in column A as it does in column B.

Column A

$$\sqrt{16} \times 16$$

Column B

$$\sqrt{(4 \times 4)^2}$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- A. A
B. B
C. C
D. D

291

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$3\sqrt{16/4}$$

Column B

$$2\sqrt{18/2}$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- A. A
B. B
C. C
D. D

292

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

P

Column B

150

$$\sqrt{P} + 3 = 15$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- A. A
B. B
C. C
D. D

293

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$5/\sqrt{6}$$

Column B

$$5\sqrt{2}/\sqrt{12}$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- A. A
B. B

294

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

D. D
C. C
B. B

Column A

$$6\sqrt{24}$$

Column B

$$12\sqrt{6}$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

C. If the two quantities are equal.

D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

295

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$6\sqrt{8}/\sqrt{2}$$

Column B

$$10$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

C. If the two quantities are equal.

D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

296

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$3/2\sqrt{6}$$

Column B

$$\sqrt{6}/4$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

C. If the two quantities are equal.

D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

297

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$0/\sqrt{8}$$

Column B

$$1$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

C. If the two quantities are equal.

D. If the relationship cannot be determined from the information given.

A. A
B. B

298

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

C. C
D. D

Column A

$$\sqrt{18/7} + \sqrt{18}$$

Column B

$$7$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

299

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$(\sqrt{7})^2 + (\sqrt{7})^3$$

Column B

$$1/\sqrt{7}$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

300

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$3\sqrt{5} - \sqrt{125} + \sqrt{20}$$

Column B

$$0$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

301

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

$$z$$

Column B

$$y$$

The average (arithmetic mean) of x and y is greater than the average of x and z .

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.

C.If the two quantities are equal.

D.If the relationship cannot be determined from the information given.

A. A

302

B. B

C. C

D. D

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of -3, 1, and 3

Column B

The average (arithmetic mean) of -3, 2, and 3

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

C. If the two quantities are equal.

D. If the relationship cannot be determined from the information given.

A. A

B. B

C. C

D. D

303

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of the even numbers between 1 and 13

Column B

The average (arithmetic mean) of the odd numbers between 2 and 14

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

C. If the two quantities are equal.

D. If the relationship cannot be determined from the information given.

A. A

B. B

C. C

D. D

304

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of 15, 215, 415

Column B

The average (arithmetic mean) of 0, 15, 215, 413

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

C. If the two quantities are equal.

D. If the relationship cannot be determined from the information given.

A. A

B. B

C. C

D. D

305

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of $2x$ and $2y$

Column B

180°

Direction: In the following type of question, each consists of two quantities, one in

column A and one in column B. You must compare two quantities and on the answer sheet fill in.

A. If the quantity in column A is greater.

B. If the quantity in column B is greater.

- C.If the two quantities are equal.
D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

306

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of a and b

Column B

The average (arithmetic mean) of a , b and $2b$

$$b > 0$$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
B.If the quantity in column B is greater.
C.If the two quantities are equal.
D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

307

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of x , y , z and 39

Column B

40

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
B.If the quantity in column B is greater.
C.If the two quantities are equal.
D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

308

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

b

Column B

0

The average (arithmetic mean) of a , b 22 and 38 is 15, and
 $a > 0$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
B.If the quantity in column B is greater.
C.If the two quantities are equal.
D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

309

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average of $\frac{2}{5}$ and $\frac{2}{7}$

Column B

$\frac{24}{35}$

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

310

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The amount of rain that falls in 1 month in Punjab.

Column B

The amount of rain that falls in 2 months in Punjab.

Direction:In the following type of question,each consists of two quantities,one in column A and one in column B.You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

311

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average of the old integers from 1 to 100.

Column B

The average of the even integers from 1 to 100.

Direction:In the following type of question,each consists of two quantities,one in column A and one in column B.You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

312

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The median of the 5 integers.

Column B

70

The average (arithmetic mean) of 5 positive integers is 70.

Direction:In the following type of question,each consists of two quantities,one in column A and one in column B.You must compare two quantities and on the answer sheet fill in.

- A.If the quantity in column A is greater.
- B.If the quantity in column B is greater.
- C.If the two quantities are equal.
- D.If the relationship cannot be determined from the information given.

A. A
B. B
C. C
D. D

313

Notes:Sometimes,in certain question,information concerning one or both the quantities to be compared is centered above the two columns.A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of 3,4 and 5

Column B

The average (arithmetic mean) of 2,3,7 and 8

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- A. A
B. B
C. C
D. D

314

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The product of the integers.

Column B

The average of the integers.

Direction: In the following type of question, each consists of two quantities, one in column A and one in column B. You must compare two quantities and on the answer sheet fill in.

- A. If the quantity in column A is greater.
B. If the quantity in column B is greater.
C. If the two quantities are equal.
D. If the relationship cannot be determined from the information given.

- A. A
B. B
C. C
D. D

315

Notes: Sometimes, in certain question, information concerning one or both the quantities to be compared is centered above the two columns. A symbol that in both columns represents the same thing in column A as it does in column B.

Column A

The average (arithmetic mean) of the measures of the three angles of an equilateral triangle.

Column B

The average (arithmetic mean) of the measure of the three angles of a right triangle.

316

Question Image

- A. 35
B. 25
C. 10
D. 29

317

Question Image

- A. 50
B. 20
C. 35
D. 10

318

What percent of the students who failed the exam would have had to pass it, in order for percent of students passing the exam to be at least 77% out of 500 ?

- A. 15%
B. 21%
C. 23%
D. 27%

319

From 2005 to 2006 the number of male earning PhD increased by s%, and the number of female earning PhD decreased by t%. What is the value of s-t?

- A. 225
B. 200
C. 275
D. 250

320

Question Image

- A. Number of students taking math is equal to the number of students taking astronomy.
B. Number of students taking math is less than the number of students taking astronomy.
C. Number of students taking math is greater than the number of students taking astronomy.
D. Cannot find from the given information.

321

Question Image

- A. 20
B. $17\frac{1}{2}$
C. 35
D. $12\frac{1}{2}$

322

Question Image

- A. 25.25
B. 36.5
C. 42.5
D. 35

323	Question Image	A. 35 B. 25 C. 27 D. 50
324	Question Image	A. 400 B. 375 C. 600 D. 800
325	Question Image	A. 50 B. 75 C. 25 D. 65
326	Question Image	A. 325 B. 225 C. 125 D. cannot be exactly determined form the given information
327	Mr. Kashif got an average of 50 in 6 tests.What should he get in the next test to attain the average of 60?	A. 120 B. 60 C. 100 D. 70
328	The average income of a family of 6 members is Rs. 5000. The income of two of them is Rs.12000. What is income of the remaining 3 persons?	A. 120000 B. 90000 C. 5000 D. 18000
329	A clerk filed 73 forms on Monday, 85 forms on Tuesday, 54 on Wednesday, 92 on Thursday, and 66 on Friday. What was the average number of forms filed per day?	A. 50 B. 95 C. 84 D. 74
330	Find the arithmetic mean of 25.2, 13.5, 18.5, and 34.8	A. 13 B. 23 C. 27 D. 5
331	The average of x,y,z and 40 is 10. What is the average of x,y and z.	A. 10 B. 0 C. 2 D. 15
332	A and B can do a job in 6 days. If A do the job alone he takes 10 days. What will be the time required by B to complete the job alone?	A. 8 B. 6 C. 15 D. 3
333	The average height of a class of 14 boys is 5.3 feet. A new boy is admitted to the class. The new average of height now becomes 5.25. What is the height of the new boy?	A. 4.55 B. 5.0 C. 6.0 D. 3.5
334	A man bought 20 used laptops at \$200 each, 9 at \$300 each, and 6 at \$100 each. Find the average price per laptops	A. \$250.55 B. \$208.57 C. \$400.50 D. \$380
335	Out of the 44 boys in a class, 9 are of the age of 10, 15 at the age of 9, and the rest are at the age of 5. Find the average age of the entire class.	A. 7.85 B. 8.75 C. 12.2 D. 14.35
336	The population of 8 villages is 900, 750, 1100, 1050, 835, 1250, 555 and 630. Find the population of ninth village if the average population of nine villages is 900.	A. 1200 B. 1065 C. 1030 D. 1800
337	Find the ratio of 18 inches to 2 yards.	A. 3/4 B. 1/4 C. 1/5 D. 2/5
338	If a train travels 5/6 mile in 1 1/4 minutes,how many miles will it travel in 1 hour?	A. 20 miles B. 50 miles C. 40 miles D. 30 miles
339	Find the value of x if 3 : b = x : c.	A. 3b/c B. c/3b C. 2c/3b D. 3c/b
340	How many miles are there between two cities if the distance is represented by a 2.4-inch line on a map having a scale of 1 inch to 8 miles?	A. 19.2 B. 12.8 C. 8.5

ing on a map having a scale of 1 inch to 5 miles:

C. 8.5
D. 38

341	If apples cost 3 for 37 cents, find the cost of $1\frac{3}{4}$ dozen apples.	A. 111 cents B. 159 cents C. 259 cents D. 211 cents
342	If 10 tractors are needed to plow a field in 4 hours, how many tractors are needed to plow the field in 5 hours?	A. 32 B. 4 C. 16 D. 8
343	A car that gets 15 miles per gallon of gasoline can travel 250 miles on a full tank. If the same car got 20 miles per gallon, how many miles could it travel on a full tank?	A. 300 B. 750 C. $250\frac{3}{4}$ D. $333\frac{1}{3}$
344	A candy recipe calls for 5 parts milk, 4 parts cocoa, 4 parts syrup, 2 parts sugar, and 1 part 1 butter. If you use 8 ounces of milk, how many ounces of candy mixture can you make?	A. $25\frac{3}{5}$ B. $5\frac{3}{5}$ C. 20 D. 128
345	If it takes 10 minutes to walk $\frac{3}{7}$ mile, how many minutes will it take to walk the rest of the mile?	A. $2\frac{1}{3}$ B. $13\frac{1}{3}$ C. $4\frac{2}{7}$ D. 30
346	A number is selected at random from first thirty natural numbers. What is the chance that it is a multiple of either 3 or 13?	A. $\frac{17}{30}$ B. $\frac{2}{5}$ C. $\frac{11}{30}$ D. $\frac{4}{15}$
347	What is the probability of getting all six in a single throw of three unbiased dice?	A. $\frac{1}{6}$ B. $\frac{125}{216}$ C. $\frac{1}{36}$ D. $\frac{1}{216}$
348	What is the probability that a two-digit number selected at random will be a multiple of '3' and not a multiple of '5'?	A. $\frac{2}{15}$ B. $\frac{4}{15}$ C. $\frac{1}{15}$ D. $\frac{4}{90}$
349	When two dice are thrown simultaneously, what is the probability that the sum of the two numbers that turn up is less than 11?	A. $\frac{5}{6}$ B. $\frac{11}{12}$ C. $\frac{1}{6}$ D. $\frac{1}{12}$
350	When 4 dice are thrown, what is the probability that the same number appears on each of them?	A. $\frac{1}{36}$ B. $\frac{1}{18}$ C. $\frac{1}{216}$ D. $\frac{1}{5}$
351	How many different 4 person teams can be made from a group of 9 players?	A. 3,024 B. 1,512 C. 378 D. 254 E. 126
352	Suzuki comes in 5 models, 8 colors, and 3 sizes. How many Suzuki must the local dealer have on hand in order to have one of each kind available?	A. 24 B. 120 C. 16 D. 39
353	How many odd numbers of three digits each can be formed from the digits 2, 4, 6, and 7 if repetition of digits is permitted?	A. 6 B. 27 C. 24 D. 16
354	If $2x + 5y = 18$ and $x = 4$ then what is the value of y?	A. 2 B. 3 C. 4 D. 5
355	In All Pakistan Weight Lifting competition in Multan, double of first lift of Mr. Sahiwal was 150 kilograms more than his second lift and the sum of two lifts was 375 kilograms. What was the weight of his first lift?	A. 300 B. 350 C. 175 D. 100
356	If three times of a number is 6 more than twice the number, What is the value of the number?	A. 2 B. 4 C. 6 D. 8
357	Saima bought two black pencils and three red pencils for Rs.23. After a week, she bought three black pencils and two red pencils for Rs. 16. If price of pencils remained the same for both transactions, how much she paid for one black pencil?	A. 2 B. 3 C. 4 D. 5

358	The value of $x^2 + 5x + 6$ at $x = 2$ is?	A. 2 B. 20 C. 40 D. 10
359	One positive number is $\frac{2}{3}$ of the other and their product is 24. what is the sum of the two?	A. 6 B. 18 C. 36 D. 24 E. 10
360	If $x + 2y = 11$ and $2x + 3y = 17$ then y is?	A. 6 B. 5 C. 4 D. 3 E. 0
361	Twice the age of son is 4 year more than the age of his father. What is the age of the son if father is of 40?	A. 22 B. 20 C. 18 D. 16 E. 14
362	If $\#n = (n-5)^2 + 5$, then find $\#3 \times \#5$.	A. 50 B. 55 C. 30 D. 40 E. 45
363	A rectangular is 16 cm long and 10 cm wide.If the length is reduced by k cm and its width is increased also by k cm so as to make it a square then its area changes by:	A. 169 B. 256 C. 100 D. 9 E. None of the above
364	If the radius of a circle is increased by 20% then the area is increased by:	A. 14% B. 120% C. 144% D. 40%
365	Naghmana has 4 shirts of red, blue, green, and brown colors. She also has 3 trousers of black, brown, and white colors. How many different shirt trouser combinations can she wear, if she has decided to wear the white trouser?	A. 4 B. 6 C. 8 D. 12 E. 24
366	What is the value of the function $k(x) = x^2 - 2$ when $x = 7$?	A. 5 B. 9 C. 45 D. 47 E. 51
367	Of the following, which value of x produces the greatest value of $f(x)$?	A. -2 B. -1 C. 1 D. 2 E. 3
368	Each man contributed dollars equal to the number of women and each woman contributed dollars equal to the number of men in a group of 120 group of 120 people, the total amount collected was Rs. 7200. How many men were there in the group?	A. 72 B. 60 C. 40 D. 80 E. None of these
369	If Dabeer is $\frac{1}{3}$ rd the age of his father Agha Jameel now, and was $\frac{1}{4}$ th the age of his father 5 years ago, how old will his father 5 years ago, how old will his father Agha Jameel be 5 years from now?	A. 20 B. 45 C. 40 D. 50 E. 15
370	Two spinning machines A and B can together produce 300,000 meters of cloth in 10 hours. If machine B alone can produce the same amount of cloth in 15 hours, how much cloth can machine A produce alone in 10 hours?	A. 200,000 meters B. 100,000 meters C. 150,000 neters D. 50,000 meters E. 250,000 meters
371	In his wardrobe, Tahir has 3 trousers.One of them is black, the second blue, and the third brown. In his wardrobe, he also has 4 shirts. One of them is black and other 3 are white. He open his wardrobe in the dark and picks out one shirt - trouser pair, without examining the color. What is the likelihood that neither the shirt the trouser is black?	A. $\frac{1}{12}$ B. $\frac{1}{6}$ C. $\frac{1}{4}$ D. $\frac{1}{3}$ E. $\frac{1}{2}$
372	Two trains start simultaneously towards each other from two points A and B separated by a distance of 1200 miles.Train leaving A moves at an average speed of 80 miles per hour while train leaving B moves at an average speed of 120 miles per hour. After how much time will both trains meet and what distance would be covered by the train leaving A by then?	A. 15 hours, 1200 miles B. 10 hours, 800 miles C. 6 hours, 480 miles D. 12 hours, 960 miles
		A. $\frac{1}{10}$

373	One sixth of a day is what part of the time between 3 p.m. Monday and 3 p.m Thursday of the same week?	B. 1/18 C. 1/15 D. 1/12
374	IF you have 50 green, 50 orange, and 50 yellow jelly beans, how many bags can you fill Halloween each containing 2 green, 3 orange, and 4 yellow jelly beans?	A. 12 B. 13 C. 16 D. 17
375	t is an integer greater than 5. The expression that must represent an odd integer is	A. $t(t + 1)$ B. $3t - 1$ C. $t > 2$ D. $2t - 3$
376	Which of the following is the sum of two consecutive prime numbers?	A. 66 B. 52 C. 41 D. 29
377	If Myra had bowling scores of $b + 6$, $b - 2$, $b + 4$, and $b - 5$, what must she score in the next game to get an overall average of $b + 2$?	A. $b + 7$ B. $b - 3$ C. $b + 3$ D. $b - 7$
378	A clock gain 8 minutes every x hours. How many hours will the clock gain in 3 days?	A. $576/x$ B. $48/5x$ C. $24/x$ D. $576/5x$
379	How many integers between 28 and 98 are exactly divisible by 7?	A. 9 B. 11 C. 12 D. 8
380	Four people are asked to stand in a straight line. In how many different orders can they line up?	A. 12 B. 16 C. 24 D. 6
381	If $(p - 3)(p + 5) > (p - 3)(p + 8)$, what is the best description of p?	A. $p = 3$ B. $-8 < p < -5$ C. $p = \{ \}$ D. $p < 3$
382	In solving an arithmetic example, Lubna, by mistake multiplied by 6 instead of dividing by 6. If her answer was $13 \frac{1}{5}$, what should be the correct answer to the example?	A. $2 \frac{8}{11}$ B. $5/66$ C. $2 \frac{1}{5}$ D. $11/30$
383	If $(36)(?)(7) - 21$ then? equals	A. $21/43$ B. $1/42$ C. $1/12$ D. $1/11$
384	How many tens are equal to the number whose hundreds, tens, and units digits are a, b, and c respectively?	A. b B. $a + \frac{1}{10}b + \frac{1}{100}c$ C. $10a + b + c$ D. $10a + b + c/10$
385	If a machine can place a cap on a bottle of soda every 0.8 seconds, how many bottles can be capped in 2 hours?	A. 8000 B. 90000 C. 300 D. 900
386	The death rates for three diseases are Disease R 2 people out of 10,000 Disease S 13 people out of 1,000,000 Disease T 9 people out of 100,000 What is the combined death rate for the three diseases?	A. 123 out of 1,000,000 B. 42 out of 10,000 C. 42 out of 1000,000 D. 303 out of 1,000,000
387	If 7 apples cost y cents, how many apples will x dollars buy?	A. $x/7y$ B. $7x/y$ C. $7x/100y$ D. $700x/y$
388	Subhanis twice as old as Bukhari, who is 3 years oldder than Shakir. If Shakir is 4a years old, Subhan's age is	A. 8a B. 22a C. 14a D. $8a + 6$
389	The average height of five men is 68 inches.If one man is 70 inches tall and three others have an average of 67 inches, the height of the fifth man, in inches, is	A. 68 B. 69 C. 70 D. 71
390	If P is a negative integer and $n^2 + 11n = t$ a value of t could be	A. 12 B. 18 C. 24 D. 30

390	If p is a negative integer and $p + 11p + 3$, a value of p could be	C. -18 D. 11
391	A businessperson started a business with a capital of Rs. 80,000. His first year accumulated profit was 10% and second year profit was 20%. What was the total amount after second year?	A. 105600 B. 201200 C. 50,000 D. 100050
392	If $x/9 = 2/3$, then $x =$	A. $8/3$ B. 6 C. 3 D. $27/2$
393	Multan traffic authority requires that an applicant for a driver's license answer at least 80 percent of the questions on a written test correctly. If the test has 60 questions on it, at least how many of these questions must be answered correctly.	A. 20 B. 44 C. 46 D. 48
394	If $x/y = -1$, then $x + y =$	A. 0 B. 1 C. y D. $2x$
395	If it takes 4 days for 3 machines to do a certain job, how many days are required to complete the job by two machines?	A. 6 days B. 2 days C. 5 days D. 3 days
396	A and B do a job together in two hours. Working alone A does the job in 5 hours. How long will it take B to do the job alone?	A. 2 hrs B. 3 hrs C. 1 hrs D. $3 \frac{1}{3}$ hrs
397	Yesterday Sagher earned Rs. 100 less than Bilal, and today Sagher earned Rs.75 more than Bilal. Which of the following must be true about Sagher's total earnings for the two days compared to Bilal's?	A. Sagher earned $3/4$ of what Bilal earned B. Sagher earned \$17.50 more than Bilal C. Sagher earned \$2.50 more than Bilal D. Sagher earned \$25 less than Bilal
398	An oil burner in a housing development burns 76 gallons of fuel oil per hour. At 9 A.M on a very cold day, the superintendent asks the housing manager to put in an emergency order for more fuel oil. At that time, he reports that he has on hand 266 gallons. At noon, he again comes to the manager, notifying him that no oil has been delivered. The maximum amount of time that he can continue to furnish heat without receiving more oil is	A. $1/2$ hr B. 1 hr C. $1 \frac{1}{2}$ hr D. 2 hr
399	If $P^2 + 5 = 22$, then $P^2 - 5 =$	A. 12 B. 17 C. 39 D. 144
400	If r , s and t are integers greater than 1, where $rs = 15$ and $st = 33$, which of the following must be true?	A. $t \geq r$; $r \geq s$ B. $s \geq t$; $t \geq r$ C. $r \geq t$; $t \geq s$ D. $s \geq t$; $r \geq t$
401	A total of 60 drawing note books were sold. If 20 percent of the first 20 sold were in color, 40 percent of the next 30 sold were in color, and 80 percent of the last 10 sold were in color, what percent of the 60 note books were in color?	A. 30% B. 40% C. 60% D. 20%
402	The Positive difference between k and $1/8$ is same as the positive difference between $1/2$ and $1/3$. Which of the following could be the value of K ?	A. $1/7$ B. $7/24$ C. $23/24$ D. $1/6$
403	How many polythene bags, each holding 8 ounces, are needed to hold $3 \frac{3}{4}$ of vegetable oil?	A. 8 B. 12 C. 14 D. 16
404	In a screening process of 5600 candidates, 20% of the candidates were disqualified in the first test. In the second test 40% of the first test qualifiers were disqualified. How many candidates qualified the test?	A. 2688 B. 1344 C. 3600 D. 5000
405	The number p is 4 more than 3 times the number r . The sum of p and r is 10. Which of the following pairs of equations could be used to find the values of p and r ?	A. $p = 3r + 4$; $p + r = 10$ B. $p = 3r + 4$; $pr = 10$ C. $p = 3(r + 4)$; $p + r = 10$ D. $p + 4 - 3r$; $p + r = 10$
406	A class of 30 girls and 40 boys sponsored a mango party. If 60 percent of the girls and 25 percent of the boys went on the party, what percent of the class went on the party?	A. 30% B. 35% C. 50% D. 40%
407	If $x = yz$, which of the following must be equal to xy ?	A. yx B. yz^2 C. xy^2 D. xyz

C. $y^{\frac{1}{2}}$
D. x/y

408	Which of the following operations has same effect as multiplying by 0.5?	A. Multiplying by $\frac{1}{2}$ B. Multiplying by 2 C. Dividing by $\frac{1}{2}$ D. Dividing by 3
409	The average of a,b,s , and t is 6 and the average of s and t is 3. What is the average of a and b?	A. 3 B. 18 C. 9 D. 12
410	If x is a positive number, then 50 percent 10x equals	A. 2x B. 4x C. 20x D. 5 x
411	What is the least of three consecutive integers whose sum is 18?	A. 2 B. 3 C. 4 D. 5
412	If $\frac{5}{6}n = 60$, then $\frac{1}{6}n = ?$	A. 8 B. 10 C. 12 D. 50
413	Question Image	
414	Question Image	A. 4 D. 10
415	Which is the greatest?	A. $\frac{4}{9}$ B. $\frac{5}{11}$ C. $\frac{8}{15}$ D. $\frac{9}{17}$
416	Question Image	A. Zero B. 9 C. 5 D. 14
417	Question Image	
418	For how many integer values of g is $6 < 3g < 12$?	A. Four B. Three C. Two D. One
419	The average of four consecutive even integers is T. The second of these integers can be represented in terms of T as:	A. $T - 1$ B. $T + 1$ C. $T + 2$ D. $4T - 8$
420	The total number of eighths in $3\frac{3}{4}$ is:	A. 15 B. 54 C. 30 D. 24
421	Question Image	A. I only B. II only C. IV only D. I, II, IV
422	Question Image	A. 24 B. 30 C. 35 D. 36
423	If 12 pounds of fudge are placed in boxes that each holds 8 ounces, how many boxes will be filled? (1 pound = 16 ounces)	A. $1\frac{1}{2}$ B. 96 C. 6 D. 24
424	If 8 is 4 percent of k, then k is 4 percent of:	A. 5000 B. 4000 C. 800 D. 80
425	If, in the class of 33, 3 are honor students, what part of the class are not honor students?	A. $\frac{89}{100}$ B. $\frac{9}{10}$ C. $\frac{10}{11}$ D. $\frac{9}{10}$
426	If $3y = 7$, the value of $6y - 3$ is:	A. 39 B. 13 C. 11

		D. 10 A. 15 B. 55 C. 95 D. 40
427	If a is 20% of b, and b is 75% of c, then a is what percent of c?	
428	Ayesha and Bisma together have \$20. Bisma and Adnan together have \$16. Ayesha and Adnan together have \$24. What is the smallest number of dollars that any girl has alone?	A. 4 B. 6 C. 10 D. 24
429	The average of the first 35 positive integers is:	A. 13 B. 17 C. 18 D. 19
430	If $2m = 4x$ and $2w = 8x$, what is m in terms of w?	A. $w - 1$ B. $w + 1$ C. $2w - 1$ D. $2w + 1$
431	In an vitro study, 160 white cats were injected with saltx. 160 other white cats were injected with placebo. In two weeks, 39% of the white cats, who were injected with SaltX showed symptoms of Kay fever? Hence, it can be concluded that Kay fever is caused by some elements similar to the elements in SaltX.Q:Which of the following statements would most seriously weaken the above discussion?	A. People suffering from Kay fever are the victims of the golden viper of Sindh B. One among the 160 white cats had already showed symptoms of Kay fever prior to the experiment C. The natural habitats of white cats does not contain any of the elements found in Salt X D. The 160 white cats used in the experiment were kept isolated from each other
432	In an vitro study, 160 white cats were injected with saltx. 160 other white cats were injected with placebo. In two weeks, 39% of the white cats, who were injected with SaltX showed symptoms of Kay fever? Hence, it can be concluded that Kay fever is caused by some elements similar to the elements in SaltX.Q:Which of the following would most strengthen the argument above?	A. Some of the elements in SaltX are extracted from the root of a certain poisonous herb of Hunzaroot of a certain poisonous herb of Hunza B. The blood test of the victims of Kay fever revealed the presence of a toxic element in their blood, normally found in salt X C. Almost all the white cats died within two days after the first symptom appeared D. Normally the rate of Kay fever among white cats is less than 0.01% E. Within two weeks, about 40% of the white cats, who were injected with placebo, also contracted Kay fever
433	Between 1990 and 1998, boarding in Muslim Degree College averaged 79 percent of capacity, while admission rates remained constant, at an average of 9 admissions per 100 rooms per year. Between 1998 and 2002, however, boarding rates increased to an average of 85 percent of capacity, while admission rates declined to 8 per 100 rooms per year.Q:Which of the following conclusions can be most properly drawn from the info given above?	A. The average stay for Muslim degree College residents rose between 1998 and 2002 B. The proportion of young student staying in the college hostel was greater in 2002 than in 1990 C. College admission rates tend to decline whenever boarding rates rise D. College built prior to 1998 generally had fewer rooms than did college built between 1998 and 2002
434	Abdullah Sheikh, senior sales officer in a multinational, has trained many top salespeople in his company, including seven who have become the top salespersons in their regions and three who have won the top salesperson award. Although there is an art to selling, Mr. Sheikh's success at training top salespeople shows that the skills required to become a top salesperson can be both taught and learned. Q:The argument above depends on which one of the following assumptions?	A. Mr Sheikh does not teach the hard-sell method. Nor does he teach the "I'll-be-your friend" method. Instead, he stresses the professional-client relationship B. More than 50% of the people trained by Mr. Sheikh went on to become successful sales people C. One of the successful salespeople who trained under Mr Sheikh was not an accomplished salesperson before learning the Sheikh's Method D. There is a large and expanding industry dedicated to training salespeople
435	The tanneries claim that chemical waste dumps pose no threat to people living near them. If this is true, then why do they locate the plants in sparsely populated regions? By not locating the chemical dumps in densely populated areas the tanneries tacitly admits that these chemicals are potentially dangerous to the people living nearby. Q:Which of the following, if true, would most weaken the tanneries argument?	A. Funding through the environmental Super Fund to clean up poorly run waste dumps is reserved for rural areas only B. Until chemical dumps are proven 100% safe, it would be imprudent to locate them were they could potentially do the most harm. C. Locating the dumps in sparsely

Q: Which of the following, if true, would most weaken the author's argument?

populated areas is less expensive and involves less government red tape
D. The potential for chemicals to leach into the water table has in the past been underestimated
E. People in cities are more likely to site the industry if their health is harmed by the drums

436

Reporter: H & B Co. has misled its clients by promoting some Egyptian porcelain figurines as rare; in fact those pieces are relatively commonplace.
H & B Representative: That is absurd! H & B is the largest antique dealer in the country. We authenticate the figurines we sell through a nationally recognized firm.
Q: The H & B Representative's reply is most vulnerable to the criticism that it .

A. exaggerates the H & B Representative's claims in order to make them appear absurd
B. accuses the H & B Representative of bias but presents no evidence to support that accusation
C. fails to establish that other antique dealers do not also authenticate the figurines those dealers sell
D. lists strengths of H & B while failing to address the representative's charge

437

Both Gujranwala Jims and Lahore Jims have printed a toll-free number on their exercise products to provide round-the-clock telephone assistance to any customer who encounters difficulties. Since customers only call the numbers when they find the exercise equipment difficult to use, and the Gujranwala Jims line receives three times as many calls as the Lahore Jims' line, Gujranwala Jims' product must be more difficult to use than Lahore Jims.
Q: Which of the following, if true, most strengthens the argument above?

A. Calls to the Lahore Jims number are almost twice as long, on average, than calls to the Gujranwala Jims' line.
B. Lahore Jims has sold four times the number of its exercise product that Gujranwala Jims has
C. Lahore Jims receives twice as many letters of complaint about its product as Gujranwala Jims receives about its product
D. The number of calls received by each of the two lines has been gradually increasing.

438

A poster in an eye clinic advises people, who have received eye drops X that blur vision, refrain from driving until they can do so safely. In a Gov't initiated hospital study, however, subjects questioned immediately after they received such drops and underestimated the time necessary to regain their driving ability. This result indicates that many people with eye drops X will be unlikely to follow the advice.
Q: Which of the following, if true, most strongly supports the argument above?

A. Many people, if they know they will receive eye drops X, make arrangements beforehand for a friend or relative to drive them home
B. The subjects in the hospital study generally rated their abilities more conservatively than they would if they were outside the framework of a scientific experiment
C. Some people ask their doctors not to give them eye drops X that blur vision if they will have to drive to get home afterward
D. The subjects in the study were also questioned about the time necessary to regain abilities that do not play an important role in driving safely

439

Shockwave lithotripsy can be used to remove painful kidney stones. In contrast to surgery - the invasive procedure customarily used, extracorporeal shockwave lithotripsy poses little risk to patients. Thus, to guarantee patient safety in the attempt to treat kidney stones, extracorporeal shockwave lithotripsy should replace kidney stone surgery in all cases.
Q: Which of the following, if true, would most support the recommendation above?

A. Kidney surgery can be used to treat other ailments of the kidneys other than kidney stones.
B. Extracorporeal shockwave lithotripsy was designed primarily in order to diagnose kidney stones.
C. Kidney surgery can reveal more information about the cause of a stone than an extracorporeal shockwave lithotripsy can.
D. An extracorporeal shockwave lithotripsy is just as likely as kidney surgery to successfully remove a kidney stone

440

Certain upgrades need to be made on each of the computers owned by Sami Publishers. The work of upgrading their 20 computers is mentally taxing. Employees are using the computers during the day, making it difficult for the computer technician to coordinate the block of time needed to work on each computer. Therefore, the most efficient time to upgrade the computers is between ten o'clock p.m. and eight o'clock a.m. when the computers are free.
Q: Which of the following, if true, argues most strongly against the view that upgrades could be done more efficiently by scheduling them at night?

A. Energy costs in businesses are greatly lower at night than they are during the day
B. More blackouts occur between midnight and eight o'clock in the morning than at any other time
C. Over the course of a year, the company's computers will require periodical checks and upkeep
D. Mental alertness is lower in the late night than during the day, especially in people not accustomed to working at night

Bus Company President: A city councilman has stated his objection to the claim that the city buses are dangerous. This is clearly untrue. None of the new buses in use has ever crashed or even had a serious malfunction. City councilman: The problem with the new

A. Characterizing the bus company president's assertion as stemming from subjective interest rather than from objective evaluation of the facts
B. Drawing attention to the fact that the bus company president's interpretation of the word "dangerous"

441	buses is not that they malfunction, but that they are no flamboyantly painted that other drivers on the road are distracted and this may cause accidents. Q:The councilman responds to the bus company president by doing which of the following?	interpretation of the word "dangerous" is too narrow C. Invoking evidence that the bus company president has explicitly dismissed as irrelevant the point at issue D. Citing statistical evidence that refutes the bus company president's claim
442	Companies in the country of Jilsan sell transistor radios in the country of Kabana at a price that is below what it costs Kabanian companies to produce them. To help those Kabanian companies, the Kabanian legislature plans to set a minimum selling price for transistor radios imported into Kabana from Jilsan that is twelve percent greater than the average production costs for companies in Kabana. Q:Which of the following, if true, most seriously threatens the success of the plan?	A. The annual rate of inflation in Jilsan is expected to exceed twelve percent within the next year B. Kabana is not the only country where Jilsan manufacturers currently sell transistor radios C. Some Kabanian companies that sell transistor radios have announced that they plan to decrease their price for transistor radios D. Emerging companies in countries other than Jilsan will be able to sell transistor radios in Kabana at a price below what it costs Kabanian companies to manufacture them
443	A local board of education has decided to allow its Urdu teachers more freedom to customize the curriculum for their classes. The teachers can edit out those sections of the curriculum they are not interested in and add material of their own choosing. Q:The widespread use of the option mentioned above is LEAST likely to contribute to fulfilling which of the following educational objectives?	A. Coverage of material relevant to a particular a student specific needs B. Coverage of basic grammatical structures and the exceptions to these grammatical structures C. Ensuring that students nationwide engaged in a specific course of study are uniformly exposed to a basic set of readings D. Making the textbooks used in classes more satisfactory from the individual teacher's point of view
444	A recent survey in country X found that more VCRs than videOtapes were purchased by its citizens last year The best interpretation of this finding is that the practice of illegally duplicating commercial videotapes is widespread. Q:Which of the following, if true, would cast doubt onthe conclusion above:	A. Very few VCR owners in country X have their own videotapes B. There are few free noncommercial videotapes available in country X C. The government of country X regularly copies and distributes material it considers to be classic content videotape free of charge, and to which the country owns copying and distribution rights D. The typical country X VCR does not purchase commercial videotapes in other countries
445	Stock analyst: "We believe Company A's stock will appreciate at 35% a year for the next 5 to 7 years. Company A just became the leader in its industry and we expect its sales to grow at 8% a year." Commentator: "But how can the stock's price be expected to grow more quickly than the company's underlying sales?" Q:Which of the following, if true, would best support the stock analyst's prediction?	A. The company's expenses will be declining over the next 5 to 10 years B. The company just won a patent on a new product C. The 5 to 7 year time frame is too long for anyone to accurately forecast D. Company A's industry peer group is expected to experience stock appreciation rates of 30% over the same time horizon
446	Acme brand aspirin claims to be the best headache relief available on the market today. To prove this claim, Acme called 10 people and asked them their thoughts on headache relief products. All 10 of them stated that they . unequivocally use Acme brand aspirin on a regular basis and that they believe it to be the best headache relief available on the market today. Q:Which of the following would most weaken this argument?	A. Acme brand aspirin is highly addictive B. The 10 people called were spouses of Acme employees C. Most people choose to suffer silently through their headaches and take no medicines whatsoever D. The 10 people called own stock in a competing company
447	My neighbor's dogs bark and howl every time their owner lets them outside. My CPA told me that dogs tend to bark and howl when they see birds resting in the top branches of their favorite trees. I personally believe they bark and howl because they enjoy disrupting my meditations. Q:Which of the following conclusions can be properly drawn from the preceding passage?	A. The dogs must be abused by their owners B. There are many pedestrians who walk by this neighbor's house, and the dogs are starving for attention C. The dogs frequently see birds in the tops of their favorite trees D. The dogs will bark and howl at 3 a.m. if they are outside at that time
	Most citizens are very conscientious about observing a law when they can see the reason behind it. For instance, there has been very little need to actively enforce the recently-Implemented law that increased the penalty for motorists caught leaving a gas station without paying for gas they had pumped into their vehicles. This is because citizens are	A. The increased penalty alone is a significant motivation for most citizens to obey the law. B. There are still too many inconsiderate citizens in the local

448	very concerned about the high cost of gasoline and they know that stealing gas will only further increase the price of gasoline for everyone. Q:With which of the following statements would the author of this passage be most likely to agree?	community C. High gasoline prices can be brought down if everyone does his or her part and pays for the gasoline they use at the pumps D. Society should make an effort to teach citizens the reasons for its laws
449	A legislator proposes that communities should therefore be required to adopt filtering systems and to reach the target of filtering 50 percent of all tap water within 5 years. Q:Which of the following, if true, most seriously calls into question the advisability of implementing the proposal?	A. Existing filtering systems programs have been private and voluntary, with citizen participation ranging from 25 percent in some communities to 70 percent in others B. Existing filtering programs have been restricted to the tap water that is ingested by humans C. Existing filtering programs have had recurrent difficulties selling their filtering systems privately usually because the quantities filtered are too small to be affordable for most families D. Some of the materials filtered out of the water are materials that can be used for other purposes E.
450	A small furniture store uses a software program called Blaze to do its basic bookkeeping. There is good reason to believe that the accounting it provides is inaccurate. Several times when the accounts were carefully calculated by a bookkeeper using an adding machine, the resulting total differed from the total the computer gave. Q:The furniture store manager's reasoning relies on which of the following assumptions?	A. The criteria that the computer uses in determining what items are included in the accounting of a particular month differ from the criteria the bookkeeper uses B. The inaccuracy of the computer's accounting does not result from a malfunction of the computer itself C. It would be possible to modify the computer so that it calculated the store's accounts more accurately. D. A careful calculation by the bookkeeper using an adding machine is unlikely to be less accurate than the computer's accounting
451	In an examination, Rizwana has more marks than that of Fauzia. Shugufta has fewer marks than that of Zahid. Fauzia and Abid have more marks than that of Shugufta. Q:If the above is true, which of the following most also be true?	A. Fauzia has fewer marks than that of Shugulta B. Rizwana has more points than that of Shugufta C. Fauzia has fewer points than that of Zahid D. Zahid has more points than that of Rizwana
452	Many people do not read the books they purchase. For example, seventeen percent of college students in Pakistan have text books, but only forty-five percent of them read more than once a year, and only seventeen percent read more than once a week. Q:Which of the following, if true, casts doubt on the claim that most people read the books they purchase?	A. Regular book readers are most susceptible to eye diseases B. Readers often exaggerate about their book reading C. Many people buy books to pretend themselves as a scholar D. The sale of novels is more than that of other types
453	Classical music occupies a unique and peculiar position in every culture. They are imperishable as cultural landmarks, but the emotions expressed in some of the folks are often superseded by newer tunes. However, the classics survive just as heritage, as imposing features of the society, yet unsuited for habitation unless remodeled. Q:The principal point put forth in the above passage is that classical works.	A. ignored by young generation B. is an obstacle in the development in new tunes C. Should be stored in museums D. Need our respect and admiration even if their tunes and ideas they express are no longer current
454	Many people especially the experts in the field of forestry are against all forest fires. They demand that all forest fires should be extinguished and let the forest die out by their own. The study of forest fires show that in the long run, forest fires may in fact, be beneficial to the ecology as a whole. Q:Among the following, which statement would logically follow from one of the observations referred to in the passage above?	A. The reason of almost all forest fires is natural B. Human beings try to extinguish the fire for gaining heat C. Studies indicate that forest fires regularly occurred in the times prior to human occupation of forest areas D. The animal and plant life destroyed by forest fires seldom represents endangered species E. Occasionally, the small fire prevents a large scale fire by the accumulation of flammable materials
455	A greater number of computers are sold in Sahiwal than in Burewala. Therefore, the people of Sahiwal are better informed about world events than are the people of Burewala. Q:Each of the following, if true, weakens the conclusion above EXCEPT:	A. Sahiwal has a larger population than Burewala B. Most people of Burewala work in Sahiwal C. Bandwidth usage of Burewala is more than that in Sahiwal

		more than that in either town D. The internet bandwidth is 128 kbps in both towns
456	People should be held accountable for their own behavior, and if holding people accountable for their own behavior entails capital punishment, then so be it. However, no person should be held accountable for behavior over which he or she had no control. Q:Which of the following is the most logical conclusion of the argument above?	A. People should not be held accountable for the behavior of other people B. People have control over their own behavior C. People cannot control the behavior of other people D. Behavior that cannot be controlled should not be punished
457	As any economist knows, healthy people pose less of an economic burden to society than unhealthy people. Not ,surprisingly, then, every rupee our government spends prenatal care for undocumented immigrants will save taxpayers of this country three rupees. Q:Which of the following, if true, would best explain why the statistics cited above are not surprising?	A. The taxpayers pay for prenatal care of all immigrants B. Pregnant women who do not receive prenatal care are more likely to experience health problems than other pregnant women C. Benefits for prenatal care serve to promote undocumented immigration D. Babies whose mothers did not receive prenatal care are just as healthy as other babies
458	There is clear evidence that the mandated vaccination to children under age four has resulted in fewer child fatalities over the past five years. Compared to the five-year period prior to the passage of laws requiring the vaccination, fatalities of children under age four have decreased by 30 percent. Q:Which one of the following, if true, most substantially strengthens the argument above?	A. The fatality rate for other age groups has remained steady over the past five years B. Air pollution has been increased over the period of past five years C. Government has implemented a malaria control campaign last year D. Health conditions in the country are better than has been previously
459	During warm weather, my dog suffers from fleas inure than during cooler weather. Therefore,fleas must thrive in a warm environment. Q:Which of the following exhibits a pattern of reasoning most similar to the one exhibited in the argument above?	A. Moose and bear usually appear at the same drinking hole at the same time of day. Therefore, moose and bear must grow thirsty at about the same time B. Children who are scolded severely tend to misbehave more often than other children do. Hence, if a child is not scolded severely that child is less likely to misbehave C. Pesticides are known to cause anemia in some people. However, most anemic people live in regions where pesticides are not commonly used D. Beautiful beaches attract people, no doubt about it. Just look at this city's beautiful beaches, which are among the most over crowded beaches in the state
460	Our educational boards should not spend their money on the new Pakistan studies reading program. After all, our students get all the information they need by studying history. Q:The argument above depends on which the following assumptions?	A. The Pakistan studies program would not help the students learn history B. Pakistan studies are no longer beneficial for Pakistani students, as they already know everything described in it C. The Pakistan studies program is contained in only history course D. Teaching history to the students is more important than teaching them Pakistan studies
461	A study of residents in Gujrat found that one fourth of the children developed considerable levels of nearsightedness five years after starting school, while their illiterate age fellows, who had no opportunity for formal schooling, showed no signs of this disability. Q:If the above statements are true, which of the following conclusions is most strongly supported by them?	A. Only literate people are nearsighted B. Almost all schools in Gujrat are surrounded by forests C. Visual stress required by reading causes nearsightedness D. One-third of the children are illiterate
462	Although most of the lucrative jobs in Pakistan will require a college degree, many of the new jobs require knowledge other than that gained in college or university. For workers in those jobs, good basic skills in reading, communication, and mathematics play an important role in getting a job and developing a career. Q:From the information given above it can be validly concluded that, in today's economy.	A. Employment agencies should conduct communication and mathematics classes B. All colleges and universities are worthless C. People should train their children for technical work D. Skills in reading, communication, and mathematics play an important role in developing a successful career

463	Unreported underground industries get no productivity support from the government. On the other hand, some industries that are run entirely by self-employed industrialists are included in national productivity measures. Q: From the information given above, it can be validly concluded that	A. All self-employed industries are under ground B. Underground industries should be banned because of their low productivity C. there are at least some industries other than those run entirely by self-employed industrialists that are underground industries D. Underground industries should be merged in large industries
464	Rizwana has never received a violation ticket from the traffic police during her 10-year driving experience. Rizwana must be a great driver. Q: Which of the following can be said about the reasoning above?	A. Rizwana is a slow driver B. Rizwana's brother is in Pakistan naval forces at a high rank, so police do not issue ticket to her C. Rizwana has high tech car D. More information is required to give the argument
465	Traveling by cars is safer than traveling by planes. Eighty percent of plane accidents result in death of all passengers, while only one percent of car accidents result in death. Q: Which of the following, if true, would most seriously weaken the argument above?	A. Planes are inspected by experienced engineers before flying B. The number of car accidents is several thousand times higher than the number of plane accidents C. Pilots are more trained than car drivers are D. Speed of car is lesser than that of plans nj
466	When I arrived at the college last week, the behavior of the students was so poor that I was shocked. The student population is completely lacking in good social skills. Q: Which of the following, if true, would weaken the above conclusion?	A. Students on boarding are often rude B. Students of sciences are often rude C. Social skills should not be expected of college students D. The enrolment in an ordinary college is more than 10,000, even in a small city in Pakistan
467	Zahid has refused to work hard for the exam preparation; therefore, no more pocket money from his father should be provided to him. Q: Which of the following is an assumption made in the argument above?	A. Zahid is a dull student B. Pocket money of his brother Abid is more C. Money has no importance in Zahid's life D. Zahid is a greedy boy, and demand more metay from his father
468	Gas heater in bedrooms has long been the main cause of home fires. Despite a significant decline in gas heaters in the last two decades, there has been no comparable decline in the number of people killed in home fires. Q: Each one of the following statements, it true over the last two decades, helps to resolve the apparent discrepancy above EXCEPT:	A. Compared to other types of some fires, home fires caused by gas heaters in bedrooms usually cause relatively little damage before they are extinguished B. Population densities have increased, with the result that one home fire can cause more deaths than in previous decades C. Gas heater users often sleep in the morning D. Home fires caused by gas heaters in bedroom often break out after the residents have fallen asleep
469	Researchers have found an inactive virus in dry bread. In previous experiments, researchers found that inactivated viruses could convert healthy cells into cancer cells. It can be concluded that the use of dry bread can cause cancer. Q: Which one of the following, if true, most seriously weakens the argument?	A. The results of many studies about the same topic were consistent B. Many other ingredients of dry bread can neutralize the effect of inactive virus C. Many of cancer patients confirmed the use of dry bread D. Ten percent of rural population use dry bread
470	The CEO of a large multinational firm wants to maxim: revenues and increase sales. The production director, however, believes that increased production would only drive down the product would only drive down the product price and lower revenues. Q: Which of the following represents the logical flaw in director's reasoning?	A. The director assumes the plant at the firm is old fashioned B. He assumes that production goals are similar to financial goals C. He assumes that the supply produced by a single company can significantly after the aggregate supply for the market D. He assumes that they are market leader with a share of more than ninety percent of the aggregate sales
	Health club membership has increased dramatically over the last five years. In order to take advantage of this increase, Fitness Express plans to open more of the same types of	A. Although it fills of the classes it opens, Fitness Express's share of all health club memberships has declined over the last five years B. Fitness Express number of classes

471	advantage of this increase, Fitness Express plans to open more of the same types of classes available during the week, while continuing its already very extensive advertising in newspapers and on the radio. Q: Which of the following if true, provides most support for the view that Fitness Express cannot increase membership on its gyms by adopting the plan outlined above?	offered to their clients has declined slightly over the last year C. Advertising has made the name of Fitness Express widely known, but few customers know that Fitness Express health clubs also offer acupuncture and shiatsu treatments D. Despite a slight decline in membership price, sales of Fitness Express memberships have fallen in the last five years
472	In a psychological experiment conducted at South Bay University, groups of men with various levels of education read stories in which people caused harm, some of them doing so intentionally, and some accidentally. When asked about appropriate penalization for those who had caused harm, the less educated men, unlike the educated ones, assigned punishments that did not vary according to whether the harm was done intentionally or accidentally. Uneducated men, then, do not regard people's intentions as relevant to penalization. Q: Which of the following, if true, would most seriously weaken the conclusion above?	A. In these stories, the severity of the harm produced was clearly stated B. In interpreting these stories, the listeners had to draw on a relatively feminine sense of human psychology in order to tell whether harm was produced intentionally or accidentally C. Relatively uneducated men are as likely to produce harm unintentionally as are more educated men D. The more educated men assigned penalization in a way that closely resembled the way women had assigned penalization in a similar experiment
473	More sports journals are sold in Hornby than in Milston. Therefore, the residents of Hornby are better informed about major sporting events than are the residents of Milston. Q: Each of the following, if true, weakens the conclusion above EXCEPT:	A. Hornby has a larger population than Milston B. Most residents of Milston work in Hornby and buy their reading material there C. The average newsstand price of journals sold in Hornby is lower than in Milston D. None of these
474	At last month's symposium on the increasing air pollution affecting the Beaumont forest, most participating members favored uniform controls on the quality of exhaust fumes, whether or not specific environmental damage could be attributed to a particular source of fumes. What must, of course, be shown, in order to avoid excessively restrictive controls, is that _____ Q: Which of the following, best completes the passage below?	A. Any uniform controls that are adopted are likely to be implemented without delay B. Environmental damage already inflicted on the Beaumont forest is reversible C. The members favoring uniform controls are those representing bodies that generate the largest quantities of exhaust fumes D. Any substance to be made subject to controls can actually cause environmental damage
475	Although the new cochleae manufactured by Medotech will cost more than twice as much as the cochlear implants now in use, Medotech implants should still be cost-effective. Not only will surgery and recovery time be reduced, but Medotech cochlear replacements should last longer, thereby reducing the need for further hospital stays. Q: Which of the following must be studied in order to evaluate the argument presented above?	A. The amount of time a patient spends in surgery versus the amount of time spent recovering from surgery. B. The amount by which the cost of producing Medotech cochlear replacements has declined with the introduction of the new technique for producing them C. The degree to which the use of Medotech cochlear replacements is likely to reduce the need for repeat surgery when compared with the use of the replacements now in use. D. The degree to which the use of Medotech replacements are more carefully manufactured than are the replacements now in use
476	Clarinet reeds often lose their freshness - become less responsive - after a few weeks of intense use. One clarinetist has hypothesized that a buildup of oil, rather than changes in the material properties of the reed, were responsible. Q: Which of the following investigations is most likely to yield significant information that would help to evaluate the hypothesis?	A. Determining what kind of wood is used to make the reeds used by jazz clarinetists B. Determining whether jazz clarinetists make their reeds lose their freshness faster than do classical clarinetists C. Determining whether identical lengths of reeds, of the same thickness, lose their freshness at different rates when put onto various brands of clarinets D. Determining whether rubbing various substances on the new reed causes them to lose their freshness.
477	Wheat has more nutritional value than rye. But since oats have more nutritional value than rice, it follows that wheat has more nutritional value than rice. Q: Any of the following, if introduced into the argument as an additional premise,	A. Wheat and oats have the same nutritional value B. Rye has more nutritional value than oats C. Rye has more nutritional value than rice

makes the argument above logically correct EXCEPT:

C. Rice has more nutritional value than rice

D. Oats have more nutritional value than wheat

478

A famous painter has recently won a lawsuit against a major food manufacturer for commissioning a graphic designer to design the packaging of its chocolate chip cookies in the painter's distinctive style. As a result of the lawsuit, manufacturers will stop asking graphic artists to copy distinctive painting styles. Therefore, the cost of package design will rise because employing the services of known artists cost more than those of graphic designers that imitate their style.

Q: The conclusion above is based on which of the following assumptions?

A. Most people are unable to distinguish a famous artist's illustration from that of a good graphic artist imitating the painter's style

B. Manufacturers will use well-known painting styles in their packaging

C. The original version of some well-known paintings are unavailable for use in packaging

D. Manufacturers will continue to use graphic artists to imitate the artistic style of famous painters

479

Excavations on the now uninhabited isle of Kelton reveal a scene typical of towns decimated by volcanic ash. Archaeologists have hypothesized that the destruction was due to volcanic activity known to have occurred in the vicinity of the island in 160 B. C.

Q: Which of the following, if true, most strongly supports the archaeologist's hypothesis?

A. No coins minted after 160 B.C. were found in Kelton, but coins minted before that year were found in abundance

B. Pieces of gold and pearl jewelry

that are often found in graves dating from years preceding and following 160 B.C. were also found in several graves on the island.

C. Most modern histories of the region mention that several major volcanic eruptions occurred near the island in 160 B.C.

D. Several small jugs carved in styles popular in the region in the century between 200 B.C. and 100 B.C. were found in Kelton

480

Many community colleges suffer declining enrollments during periods of economic recession. At government retraining programs, which are not provided free of charge, enrollment figures boom during these periods when many people have less money and there is more competition for jobs.

Q: Each of the following, if true, helps to explain the enrollment increases in government retraining programs above EXCEPT:

A. During periods of economic slowdown, government retraining programs are more likely those community colleges to prepare their students for the jobs that are still available.

B. During periods of economic prosperity, graduates of government retraining programs often continue their studies in community colleges

C. Tuition at most government retraining programs is a fraction of that at community colleges

D. Government retraining programs devote more resources than do other colleges to attracting those students especially affected by economic slowdowns.

481

Parents of some of the children in a particular class have claimed that the teacher is not objective and favors his male students with higher grades. But the record showed that 92% of the female students received a passing grade in this teacher's class. This record demonstrates that the teacher has not discriminated against women when assigning grades.

Q: The argument above is flawed in that it ignored the possibility that.

A. A large number of the teacher's student were in his class the previous year

B. Many teachers find it difficult to be objective when assigning grades to male and female students

C. The evidence shows that more than 92% of the female students should have received a passing grade

D. The majority of tests written by female students and that have been rechecked by another teacher were given a higher grade by the second teacher

482

The number of young adults that are illiterate has dropped significantly in a certain county over the last fifteen years. Education officials attribute this decrease entirely to improved conditions in the schools, which made for a better teaching environment, reducing the level of illiteracy.

Q: Which of the following, if true, would most seriously weaken the education officials' explanation for the lower incidence of the disease?

A. Many similar improvements in school conditions have been made over the last twenty-five years in the county

B. Home-schooling has not been more prevalent among the illiterate as compared to people who are not illiterate

C. Because of a new assessment scale, many people who until this year would have been considered illiterate are now considered low-level readers

D. The same percentage of the population has been tested every year for the last 30 years

A. Most of the new jobs created by automated equipment pay less than the jobs that were eliminated by

483	In many hospitals, more and more monitoring is being carried out by automated equipment instead of human employees who previously carried out the work. This is done in an attempt to save hospital expenses. However, many employees who lose their jobs to automation will need government assistance to get by, and the same corporations that are laying people off will eventually pay for that assistance through increased taxes and unemployment insurance payments. Q: Which of the following, if true, most strengthens the author's argument?	the jobs that were eliminated by automated equipment did B. Many hospitals that have failed to automate have seen their profits decline C. Unemployment insurance and taxes are paid also by corporations that are not automating D. Many workers who have already lost their jobs to automated equipment have been unable to find new employment
484	Many people claim that advertisements of alcoholic drinks influence young people to start drinking socially. In Iceland, however, where there has been a ban on the advertisement of alcoholic beverages since 1982, drinking is at least as prevalent among young people as it is in countries that do not have a similar ban. Q: Which of the following statements draws the most reliable conclusion from the information above?	A. Advertising does not play a role in causing young people to start or continue drinking B. Advertisements of alcoholic drinks cannot be the only factor that affects the prevalence of drinking among young people C. Banning advertisements of alcoholic drinks does not reduce the consumption of alcoholic drinks D. More youths drink if they are not exposed to advertisements of alcoholic drinks than if they are
485	The Burmese ferret badger burrows its home in the ground. Based on the fact that different local populations of Burmese ferret badgers of the same species dig homes of different styles, zoologists have concluded that the badgers' building styles are a culturally acquired, rather than a genetically transmitted, trait. Q: Which of the following, if true, would most strengthen the conclusion drawn by the zoologists?	A. There are more common characteristics than there are differences among the Burmese ferret badger's styles of the local Burmese ferret badger population that has been studied most extensively B. Young Burmese ferret badgers are inept at digging burrows and apparently spend years watching their elders before becoming accomplished in the local style C. The homes of one species of badger lack the characteristics of the homes of most other species of badger D. Burmese ferret badgers are found only in Burma and India, where local populations of the badgers apparently seldom have contact with one another
486	The cost of manufacturing sports shoes in Macao is 25% less than the cost of manufacturing them in the Philippines. Even after transportation fees and tariff charges are added, it is still cheaper for a company to import sports shoes from Macao to the Philippines than to manufacture sports shoes in the Philippines. Q: The statements above, if true, best support which of the following assertions?	A. Labor costs in Macao are 25% below those in the Philippines B. Importing sports shoes from Macao to the Philippines will eliminate 25% of the manufacturing jobs in the Philippines C. The tariff on sports shoes imported from Macao to the Philippines is less than 25% of the cost of manufacturing sports shoes in the Philippines D. The fee for transporting a pair of sports shoes from Macao to the Philippines is more than 25% of cost of manufacturing the shoes in Macao
487	Opponents of laws that require motorcycle riders to wear helmets argue that in a free society people have the right to take risks as long as the people do not harm others as a result of taking the risks. As a result, they conclude that it should be each person's decision whether or not to wear a helmet. Q: Which of the following, if true, seriously weakens the conclusion drawn above?	A. Many new motorcycles are built with safety features that made them less likely to be involved in an accident B. Motorcycle insurance rates for all motorcycle owners are higher because of the need to pay for the increased injuries or deaths of people not wearing helmets C. Participants in certain extreme sports are required to wear helmets D. The rate of automobile fatalities in states that do not have mandatory helmet laws is greater than the rate of fatalities in states that do have such laws
488	Harper's Pencils manufactures and sells the same pencils as Johnson's Supply. Employee wages account for forty percent of the cost of manufacturing pencils at both factories. Harper's is seeking a competitive edge over Johnson's supply. Therefore, to promote this end, Harper's should lower employee wages. Q: Which of the following, if true, seriously weakens the argument above?	A. Because they make a small number of specialty artist's pencils, pencil manufacturers cannot receive volume discounts on raw materials B. Lowering wages would reduce the quality of employee work and this reduced quality would lead to lowered sales C. Harper's Pencils has taken away twenty percent of Johnson's Supply business over the last year

D. Johnson's Supply pays its employees, on average, ten percent more than does Harper's Pencils

489

In some cities, many potters have been winning acclaim as artists. But since pottery must be useful, potters must exercise their craft with an eye to the practical utility of their product. For this reason, pottery is not an art.

Q: Which of the following is an assumption that supports drawing the conclusion above from the reason given for that conclusion?

A. Some plates, bowl and vessels are made to be placed in museums where

they will not be used by anyone

B. Some potters are more concerned than ()filers with the practical utility of the products they produce

C. Potters should be more concerned with the practical utility of their products than they currently are

D. An object is not an art object if its maker pays attention to the objects' practical utility

490

Activity levels of the green iguana vary in cycles that are repeated every 24 hours. It is logical to assume that alteration in the intensity of incident light is the stimulus that controls these daily biological rhythms. But there is much evidence to contradict this hypothesis.

Q: Which of the following, if known, is evidence that contradicts the hypothesis stated above?

A. The temperature of the green iguana varies throughout the day, with the maximum occurring in the late afternoon and the minimum in the morning

B. While some animals, such as the rabbit, are much more active during the day, others, such as moles, show greater activity at night

C. When animals are transported from one time zone to another, their daily biological rhythms adjust in a matter of days to the periods of sunlight and darkness in the new zone

D. Even when exposed to constant light intensity around the clock, some iguanas display rates of activity that are much greater during daylight hours than at night.