

## Quantitative Reasoning Algebra Test

Sr	Questions	Answers Choice
1	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?	A. 1/10 B. 1/18 C. 1/15 D. 1/12
2	If you have 50 green, 50 orange, and 50 yellow jelly beans, how many bags can you fill for Halloween each containing 2 green, 3 orange, and 4 yellow jelly beans?	A. 12 B. 13 C. 16 D. 17
3	If abc= 2 and a = c then b =	A. a <sup>2</sup> B. 1/2a C. 2/a <sup>2</sup> D. 2-a <sup>2</sup>
4	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 <sup>2</sup> D. 2t-3
5	Which of the following is the sum of two consecutive prime numbers?	A. 66 B. 52 C. 41 D. 29
6	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
7	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
8	How many integers between 28 and 98 are exactly divisible by 7 ?	A. 9 B. 11 C. 12 D. 8
9	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
10	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
11	In solving an arithmetic example, Donna, by mistake multiplied by 6 instead of dividing by 6. If her anser was 13 1/5, what should be the correct answer to the example ?	A. 2 8/11 B. 5/66 C. 2 1/5 D. 11/30
12	If (36)(?)(7)=21, then ? equals	A. 21/43 B. 1/42 C. 1/12 D. 1/11
13	How many tens are equal to the number whose hundreds, tens, and units digits are a, b, and c, respectively?	A. b C. 10a+b+c
14	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. 9000 C. 300 D. 900
15	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
		A. 8a

16	Dave is twice as old as Bob, who is 3 years older than Steve. If Steve is 4a years old, Dave's age is	B. 22a C. 14a D. 8a + 6
17	Question Image	A. 25/32 B. 7/8 C. 32/25 D. 11/10
18	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
19	If p is a negative integer and $P^2$ + 11p = t, a value of t could be	A. 12 B. 18 C18 D. 11
20	x + y =17 and x=2, then value of y?	A. 13 B. 15 C. 19 D. 10
21	If $x + 2y = 11$ and $x + y = 10$ the value of y is:	A. 1 B. 2 C. 3 D. 4
22	If $x + 3y = 7$ and $2x + y = 5$ then value $x/y$ is?	A. 1/2 B. 1/3 C. 2/5 D. 8/9
23	The value of $x^2$ + 5x +6 at x=2 is:	A. 10 B. 14 C. 18 D. 20
24	If 2x + y + b11 nad 3x + 2y =17 then y is?	A. 1 B. 5 C. 6 D. 4
25	2x2y when multiplied with $x^2 + y^2$ gives ?	A. 2x <sup>2</sup> y <sup>3</sup> + 2xy <sup>3</sup> + 8. 2x <sup>4</sup> y+ 2x <sup>2</sup> y<5up>3 C. 2xy <sup>2</sup> + 2x <sup>2</sup> + 2x <sup>2</sup> + 2x <sup>2</sup> y D. 2xy <sup>3</sup> + 2x <sup>3</sup> y D. 2xy <sup>3</sup> + 2x <sup>3</sup> y
26	The value of $\{0.5^4 - 0.4^4\} / \{0.5^2 + 0.4^2\}$ is?	A. 0.9 B. 0.09 C. 0.19 D. 0.31
27	If $a^2$ - $b^2$ =36 and a-b =12 then average of 'a' and 'b' is?	A. 3 B. 12 C. 6 D. 3/2
28	If $(x+1/x)^2=96$ what is the value of $x^2 + 1/x^2$ ?	A. 94 B. 98 C. 100 D. 90
29	$(x+y)^2=25$ and $x^2+y^2=13$ then xy is equal to?	A. 16 B. 20 C. 18 D. 6
30	When $3x^2+5x+7$ is subtracted from $x^2+8x+3$ the result is?	A. 5x <sup>2</sup> -3x+4 B. 3x-2x <sup>2</sup> -4 C. x <sup>2</sup> +8x+10 D. 11x <sup>2</sup> +3x+10
31	The value of $(x+y)^2 + (x-y)^2$ is?	A. 4 B. 2(x <sup>2</sup> +y <sup>2</sup> ) C. 4xy D4xy
32	The value of $(x+y)^2$ - $(x-y)^2$ is?	A. 4 B. x <sup>2</sup> +y <sup>2</sup> C. 4xy D4xy
		A (y+=) / (y =)

A. (v+z) / (v-z)

33	1/x=1/y+1/z then 'x' in terms of 'y' and 'z' is given by?	B. yz / (y+z) C. (y+z)/ yz D. 1/z-1/y
34	If 3x+5y=10 and 3y+5x=30 then average if 'x' and 'y' is?	A. 3/2 B. 4 C. 5/2 D. 7/2
35	Ay-b=c-dy what is 'y' in terms of 'a', 'b' and 'c'?	A. 30 B. 38/2 C. 38/3 D. 38/5
36	Ay-b=c,dy what is 'y' in terms of 'a', 'b' and 'c'?	A. (c+b) / (a+d) B. (c-b) / (a+d) C. (c-b) / (a+d) D. (c+b) / (a-d)
37	If $x=7y+3$ and $z=49y^2$ then what is 'z' in terms of x?	A. X2 B. x <sup>2</sup> -3 C. (x-3) <sup>2</sup> /7 D. None
38	If 4x-y=13 and 3x-2y=7 then what is the average of 'x' and 'y'?	A. 4 B. 3 C. 2 D. 6
39	If 'x' and 'y' are positive and 1/x=3+1/y is 'x' greater than 'y'?	A. Yes B. No C. It cannot be determined D. They are equal
40	Find the ratio of 18 inches to 2 yards.	A. 3/4 B. 1/4 C. 1/5 D. 2/5
41	If a train travels 5/6 miles 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
42	Find the value of x if 3:b=x:c.	A. 3b/c B. c/3b C. 2c/3b D. 3c/b
43		
	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. 19.0 B. 12.8 C. 8.5 D. 38
44		B. 12.8 C. 8.5
44	line on a map having a scale of 1 inch to 8 miles?	B. 12.8 C. 8.5 D. 38 A. 100mr / t B. mr / 100 C. 100t / mr
	line on a map having a scale of 1 inch to 8 miles?  How many cents will r books cost if t books cost m dollars?	B. 12.8 C. 8.5 D. 38 A. 100mr / t B. mr / 100 C. 100t / mr D. m / 100t A. 111 cents B. 159 cents C. 259 cents
45	How many cents will r books cost if t books cost m dollars?  If apples cost 3 for 37 cents, find the cost of 1 3/4 dozen apples.  If 10 tractors are needed to plow a field in 4 hours, how many tractors are needed to plow	B. 12.8 C. 8.5 D. 38  A. 100mr / t B. mr / 100 C. 100t / mr D. m / 100t  A. 111 cents B. 159 cents C. 259 cents D. 211 cents  A. 32 B. 4 C. 16
45 46	How many cents will r books cost if t books cost m dollars?  If apples cost 3 for 37 cents, find the cost of 1 3/4 dozen apples.  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 car that gets 15 miles per gallon of gasoline can travel 250 miles on a full tank. If the	B. 12.8 C. 8.5 D. 38 A. 100mr / t B. mr / 100 C. 100t / mr D. m / 100t A. 111 cents B. 159 cents C. 259 cents D. 211 cents A. 32 B. 4 C. 16 D. 8 A. 300 B. 750 C. 250 3/5
45 46 47	How many cents will r books cost if t books cost m dollars?  If apples cost 3 for 37 cents, find the cost of 1 3/4 dozen apples.  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 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 candy recipe calls for 5 parts milk, 4 parts cocoa, 4 parts syrup, 2 parts sugar, and 1 part	B. 12.8 C. 8.5 D. 38 A. 100mr / t B. mr / 100 C. 100t / mr D. m / 100t A. 111 cents B. 159 cents C. 259 cents D. 211 cents A. 32 B. 4 C. 16 D. 8 A. 300 B. 750 C. 250 3/5 D. 333 1/3 A. 25 3/5 B. 5 3/5 C. 20

51	If a pipe can fill a tank in 2 hours and another pipe can fill the same tank in 40 minutes. how much time in minutes is needed to fill the tank if both the pipes are working together?	A. 90 B. 50 C. 60 D. 30
52	A clerk filled 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 filled per day?	A. 50 B. 95 C. 84 D. 74
53	Find the arithmetic mean of 25.2, 13.5, 18.5 and 34.8	A. 13 B. 23 C. 27 D. 5
54	The average of x,y,z and 40 is 10. What is the average of x,y, adn z.	A. 10 B. 0 C. 2 D. 15
55	A and B can do a jobs in 6 days. If A does the job alone he takes 10 days. What will be time required by B to complete the job alone?	A. 8 B. 6 C. 15 D. 3
56	The average height of a class of 14 days is 5.3 feet. After new boy is admitted to the class ,the new average 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
57	A man bought 27 packets of Chilli Milli at\$280 wach, 9 packets of Chilli Milli at\$320 each and 6 packets of Chilli Milli at\$360 each. Find the average price per packet of Chilli Milli.	A. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$250</span> B. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$300</span> C. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$400</span> D. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$400</span> D. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: 16px;">\$380</span>
58	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 of 8. Find their average age.	A. 7.85 B. 8.75 C. 12.2 D. 14.35
59	The population of 8 villages is 900, 750, 1100, 1050, 835, 1250, 555, and 630. Find teh population of Ninth village if the average population of Nine villages is 900.	A. 1200 B. 1050 C. 1030 D. 7070
60	What is the number , 5% of which is 10?	A. 200 B. 100 C. 50 D. 10
61	What is the sum of money, 6% of which is 18 dollars?	A. 600 B. 200 C. 300 D. 20
62	Find the sum of money,11% of which is Rs.1650.	A. 150 B. 3300 C. 25000 D. 15000
63	A man has Rs.2000 and spends 18% of it. What money has he left now?	A. 3600 B. 820 C. 1640 D. 4000
64	In a school there are 400 students , of whom 70% are boys. What is the number of girls?	A. 130 B. 200 C. 280 D. 2800
65	The population of a city increased in two years from 25,000 to 30,000; find the percent increase during the time.	A. 10% B. 20% C. 40% D. 5%
66	A man opens a bookstall with a capital of Rs.25000. In three months his capital amounts to rupees 27500. What is the increase percent?	A. 1% B. 10% C. 20% D. 7%
		۸ 10

67	A man spent 10% of his money .After spending 60% of the reminder he has Rs.72 left. How much had he in the start?	A. 10 B. 100 C. 200 D. 400
68	A word processing operator typed 44 words per minute. After practice, the operator's speed increased to 55 words per minutes. By what percent did the operator's speed increase?	A. 25% B. 50% C. 15% D. 20%
69	The annual decrease in the population of a city was 10% and the present number of inhabitants is 1620. What was the population 2 years hence?	A. 20 B. 400 C. 2000 D. 1000
70	One-sixth of a day is what part of the time between 3 p.m. Monday and 3 a.m. Thursday of the same week?	A. 1/10 B. 1/18 C. 1/15 D. 1/12
71	If you have 50 green , 50 orange, and 50 yellow jelly beans, how many bags can you fill for Halloween each containing 2 green, 3 orange, and 4 yellow jelly beans?	A. 12 B. 13 C. 16 D. 17
72	If abc = 2 and a =c then b=	A. a <sup>2</sup> B. 1/2a C. 2/a <sup>2</sup> D. 2-a <sup>2</sup>
73	t is an integer than 5. The expression that must represent an odd integer is:	A. 1(t+1) B. 9t-1 C. t <sup>2</sup> D. 2t-3
74	Which of the following is the sum of two consective prime numbers?	A. 66 B. 52 C. 41 D. 29
75	In Myra had bowling scores of b+6, b-2, b+4, and b-5. what must she score in the next game to get overall average of b+2?	A. b+7 B. b-3 C. b+3 D. b-7
76	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
77	How many integers from 28 to 98, both exclusive are exactly divisible by 7?	A. 9 B. 11 C. 12 D. 8
78	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
79	If $(p-3)(p+4) > (p-3)(p+8)$ , what is the best description of p?	A. p=3 B8 <p<-5 C. p={ } D. p&lt;3</p<-5 
80	In solving an arithmetic example, Donna, by mistake multiplied by 6 instead of dividing by 6. If her answer was 13 1/5, what should be the correct answer to the example?	A. 2 8/11 B. 5/66 C. 2 1/5 D. 11/30
81	If (36)(?)(7)=21, then ? equals	A. 21/43 B. 1/42 C. 1/12 D. 1/11
82	How many tens are equal to the number whose hundreds, tens, and units digits are a,b,c, respectively?	A. b B. a+1/10b+1/100c C. 10a+b+c D. 10a+b+c/10
83	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. 9000 C. 300 D. 900
84	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	A. 123 out of 1,000,000 B. 42 out of 10,000 C. 42 out of 1000,000

	Disease R 2 People out of 10,000 What is the combined death rate for the three diseases?	D. 303 out of 1,000,000
85	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
86	Dave is twice as old as Bob, who is 3 years older than steve. If Steve is 4a years old, Dave's age is:	A. 8a B. 22a C. 14a D. 8a+6
87	If 3 1/5 c=2 1/2 b and c≠0, then b/c=?	A. 25/32 B. 7/8 C. 32/25 D. 11/10
88	The average height of five men is 68 inches. If one man is 70 inches tall and three other have an average of 67 inches, the height of the fifth amn, in inches, is:	A. 68 B. 69 C. 70 D. 71
89	If p is a negative integer and $p^2+11p=t$ , a value of t could be:	A. 12 B. 18 C18 D. 11