

## GAT-B Arts, Humanities & Social Science Quantitative

Sr	Questions	Answers Choice
1	If $A > B$ and $C < 0$ , then which of the following is not true ?	A. $AC < BC$ B. $A + C > B + C$ <b>C. <math>A - C &lt; B - C</math></b> D. All of the above
2	If $a + b > 7$ and $a - b > 5$ , then which of the following gives all possible values of $a$ and only possible value of $b$ ?	<b>A. <math>a &gt; 6</math></b> B. $a < 5$ C. $a > 4$ D. $a < 7$
3	If $a > 0$ , $b > 0$ and $a - b < 0$ , then ?	A. $a < b$ B. $a + b < 0$ <b>C. <math>a &gt; b</math></b> D. $b - a < 0$
4	If $xy > 0$ and $x < 0$ , which of the following negative ?	A. $-x$ B. $-y$ <b>C. <math>y</math></b> D. $xy$
5	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 <b>D. 9</b>
6	If $4^{x+5} = 8^{x-1}$ , what is the value of $x$ ?	<b>A. <math>\frac{3}{5}</math></b> B. $-\frac{5}{3}$ C. $-\frac{3}{5}$ D. 4
7	If $x$ is a positive number and $x^2 + 36 = 100$ , what is the value of $x$ ?	<b>A. 6</b> <b>B. 8</b> C. 14 D. 64
8	If $\frac{1}{x-y} = 7$ , then $x =$	A. $x + \frac{1}{7}$ <b>B. <math>x - \frac{1}{7}</math></b> C. $\frac{1}{7} - x$ D. $x - \frac{1}{7} - 1$
9	If $81^{10} = 3^{x-7}$ , what is the value of $x$ ?	<b>A. 47</b> B. 27 C. 51 D. 14
10	If $2x - 3 = 15$ , what is the value of $(2x - 3)^2$ ?	<b>A. 81</b> B. 227 C. ±225 D. 225
11	If $\frac{1}{2}x + \frac{1}{4}x + \frac{1}{8}x = 22$ , what is the value of $x$ ?	<b>A. 88</b> B. 44 C. 1 <b>D. 24</b>
12	If $at - b = c - dt$ , what is the value of $t$ in terms of $a$ , $b$ , $c$ and $d$ ?	<b>A. <math>\frac{b-c}{a-d}</math></b> B. $\frac{a}{b}$ C. $\frac{c}{d}$ <b>D. <math>\frac{b+c}{a+d}</math></b>
13	If $x - 5 = 9$ , what is the value of $x^2 - 5$ ?	<b>A. 196</b> <b>B. 191</b> C. 16 D. 11
14	If $3x + 17 = 9 - x$ , what is the value of $x$ ?	<b>A. 2</b> B. 3 <b>C. -2</b> D. -3
15	If $5x + 12 = 44$ , what is the value of $5x - 12$ ?	<b>A. 24</b> B. 32 <b>C. 20</b> D. 22

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- 16 If  $3x + 9 = 18$ , what is the value of  $x + 3$  ?  
A. 3  
B. 6  
C. -3  
D. 36
- 17  $3x^2 - 27/x-3$  and ( $x>0$ ), is:  
A. less than  $2<|>x</i>+9$   
B. equal to  $2<|>x</i> + 9$   
C. greater than  $2<|>x</i> + 9$   
D. cannot find
- 18  $(a + b)(a - b) =$   
A.  $a(a - b) - b(a - b)$   
B.  $a(b - a) + b(a - b)$   
C.  $a(a + b) - b(b + a)$   
D.  $a(a - b) + b(b - a)$
- 19 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
- 20 If  $x > y$ , then  $(x - y)(x + y)$  is :  
A. equal to  $(x - y)(x + y)$   
( $x - y$ )  
B. less than  $(x - y)(x + y)$   
( $x - y$ )  
C. greater than  $(x - y)(x + y)$   
( $x - y$ )  
D. options A and C
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