

## NAT II Arts & Humanities Quantitative

Sr	Questions	Answers Choice
1	If the radius of the circle is halved, then its area	A. Remains same B. Become half <b>C. Become quarter</b> D. Become double E. Not changed
2	The value of $(x+y)^2 - (x-y)^2$ is?	A. 4 B. $(x^2 + y^2)$ <b>C. <math>4xy</math></b> D. $-4xy$
3	If $x\%$ of 60 = 48, then $x = ?$	A. 80 B. 60 C. 90 D. 40
4	$(x+y)^2 = 25$ and $x^2 + y^2 = 13$ then $xy$ is equal to?	A. 16 B. 20 C. 18 <b>D. 6</b>
5	$2/3 \times 12 =$	A. 4 B. 6 <b>C. 8</b> D. 10 E. 18
6	When $3x^2 + 5x + 7$ is subtracted from $x^2 + 8x + 3$ the result is?	A. $5x^2 - 3x + 4$ <b>B. <math>3x - 2x^2 - 4</math></b> C. $x^2 + 8x + 10$ D. $11x^2 - 3x + 10$
7	$(60)^2 = ? \times 72$	A. 36 B. 3600 C. 40 <b>D. 50</b>
8	12% of $x = 360$	A. 250 B. 100 C. 400 <b>D. 3000</b>
9	The average (arithmetic mean) of $8a + 5$ , $-3a$ , 9, 0 and $7a - 2$ ?	A. $3a + 1$ <b>B. <math>3a + 3</math></b> C. $4a + 1$ D. $4a + 4$ E. $12a + 12$
10	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 <b>C. 2000</b> D. 1000
11	A man bought 27 packets of Chilli Milli at \$280 each, 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. \$250 <b>B. \$300</b> C. \$400 D. \$380
12	$1/2 \text{ of } 44 \div 2.2 = ?$	<b>A. 20</b> B. 22 C. 44 D. 100
13	A number which is divisible by both 6 and 8 is also divisible by	A. 7 B. 5 C. 11 <b>D. 9</b> E. 24
14	If 'x' and 'y' are positive and $1/x = 3 + 1/y$ is 'x' greater than 'y'?	A. Yes <b>B. No</b> C. It cannot be determined D. They are equal

15 If the ratio of  $x : y$  is 9 : 7, then  $x + y$  is  
A. 16  
B. 2  
C. 1  
D. None of the above

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16 If  $(x + 1/x)^2 = 96$  what is the value of  $x^2 + 1/x^2$ ?  
A. 94  
B. 98  
C. 100  
D. 90

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17 Which of the following is closest to the square root of 1/2?  
A. 0.7  
B. 0.6  
C. 0.8  
D. 0.25  
E. 0.5

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18 Question Image

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19  $.007 \div \sqrt{.000049}$   
A. 1  
B. .0049  
C. 2  
D. 7

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20 If 10 tractors are needed to plow a field in 4 hours, how many tractors are needed below to plow the field in 5 hours?  
A. 32  
B. 4  
C. 16  
D. 8