

## Quantitative Reasoning Algebra Test For Nat

| Sr | Questions   | Answers Choice   |
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| 1  | When $3x^2+5x+7$ is subtracted from $x^2+8x+3$ the result is?   | A. $5x^2-3x+4$<br>B. $3x^2-2x^2-4$<br>C. $x^2+8x+10$<br>D. $11x^2+3x+10$ |
| 2  | If $a^2 - b^2 = 36$ and $a-b = 12$ then average of 'a' and 'b' is?  | A. 3<br>B. 12<br>C. 6<br>D. $3/2$  |
| 3  | How many integers from 28 to 98, both exclusive are exactly divisible by 7?   | A. 9<br>B. 11<br>C. 12<br>D. 8   |
| 4  | A man spent 10% of his money .After spending 60% of the remainder he has Rs.72 left. How much had he in the start?  | A. 10<br>B. 100<br>C. 200<br>D. 400                                      |
| 5  | If 'x' and 'y' are positive and $1/x=3+1/y$ is 'x' greater than 'y'?  | A. Yes<br>B. No<br>C. It cannot be determined<br>D. They are equal       |
| 6  | t is an integer than 5. The expression that must represent an odd integer is:   | A. $1(t+1)$<br>B. $9t-1$<br>C. $t^2-2$<br>D. $2t-3$                      |
| 7  | In a school there are 400 students , of whom 70% are boys. What is the number of girls?   | A. 130<br>B. 200<br>C. 280<br>D. 2800                                    |
| 8  | Find the ratio of 18 inches to 2 yards.   | A. 3/4<br>B. 1/4<br>C. 1/5<br>D. 2/5                                     |
| 9  | The value of $\{0.5^4 - 0.4^4\} / \{0.5^2 + 0.4^2\}$ is?  | A. 0.9<br>B. 0.09<br>C. 0.19<br>D. 0.31                                  |
| 10 | 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<br>B. 22a<br>C. 14a<br>D. $8a + 6$                                 |
| 11 | In solving an arithmetic example, Donna, 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. $2 \frac{8}{11}$<br>B. $5/66$<br>C. $2 \frac{1}{5}$<br>D. $11/30$     |
| 12 | If $(x+1/x)^2=96$ what is the value of $x^2 + 1/x^2$ ?  | A. 94<br>B. 98<br>C. 100<br>D. 90  |
| 13 | 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<br>B. 9000<br>C. 300<br>D. 900                                   |
| 14 | If $x + 3y = 7$ and $2x + y = 5$ then value $x/y$ is?   | A. 1/2<br>B. 1/3<br>C. 2/5<br>D. 8/9                                     |
| 15 | If $(36)(?)(7)=21$ , then ? equals  | A. 21/43<br>B. 1/42<br>C. 1/12<br>D. 1/11                                |

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16 If  $(p-3)(p+5) > (p-3)(p+8)$ , what is the best description of  $p$  ?  
A.  $p = 3$   
B.  $-8 < p < -5$   
C.  $p = \{ \text{ } \}$   
D.  $p < 3$

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17 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

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18 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

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19 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

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20 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

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