GRE Quantitative Reasoning Practice Test-5, 2024

Time Allowed : 1 Hour 58 Minutes	**Maximum Marks :** 340

General Instructions

Read the following instructions very carefully and strictly follow them:

1. There is no penalty for incorrect answers on the Verbal Reasoning and Quantitative Reasoning sections. This means you should always answer every question, even if you have to guess.
2. Within any section of the test, you can mark questions you want to review and change your answers as long as the time for that section has not expired.
3. The Analytical Writing section is always presented first. The Verbal Reasoning and Quantitative Reasoning sections may appear in any order after the essay.
4. The test is taken on a computer, and test-takers are provided with scratch paper or a small whiteboard for notes.
5. The Quantitative Reasoning section includes an on-screen calculator.
6. There are no breaks during the test. Leaving your seat at any point will not stop the timer for the current section.

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1. If $3x + 2 = 11$, what is the value of x?

(A) 5
(B) 3
(C) 4
(D) 2

2. The average (arithmetic mean) of 5, 10, 15, and 20 is:

(A) 12.5
(B) 15
(C) 10
(D) 13

3. If a car travels 150 miles in 2.5 hours, what is the average speed in miles per hour?

(A) 50 miles per hour
(B) 55 miles per hour
(C) 60 miles per hour
(D) 65 miles per hour

4. Solve for y: $2y - 7 = 3y + 4$.

(A) -11
(B) 11

(C) -7
(D) 7

6. If $f(x) = x^2 - 3x + 2$, find $f(2)$.
(A) 0
(B) 2
(C) -2
(D) 4

7. Expand the expression $(x + 3)(x - 2)$.
(A) $x^2 + x - 6$
(B) $x^2 - x - 6$
(C) $x^2 + 6x - 6$
(D) $x^2 - 6x - 6$

8. If $x^2 = 16$, what are the possible values of x?
(A) 4
(B) -4
(C) 4 or -4
(D) 0

9. What is the area of a triangle with a base of 8 cm and a height of 5 cm?
(A) $20\,\text{cm}^2$
(B) $30\,\text{cm}^2$
(C) $40\,\text{cm}^2$
(D) $10\,\text{cm}^2$

10. What is the circumference of a circle with a radius of 7 cm?
(A) $43.96\,\text{cm}$
(B) $44.96\,\text{cm}$
(C) $40.96\,\text{cm}$
(D) $38.96\,\text{cm}$

11. Find the length of the hypotenuse of a right triangle with legs of length 6 cm and 8 cm.
(A) $12\,\text{cm}$
(B) $10\,\text{cm}$
(C) $8\,\text{cm}$
(D) $6\,\text{cm}$

12. What is the volume of a cylinder with a radius of 3 cm and a height of 5 cm?
(A) $141.3\,\text{cm}^3$
(B) $120.5\,\text{cm}^3$
(C) $135.5\,\text{cm}^3$
(D) $150.5\,\text{cm}^3$

13. The mean of five numbers is 8. If four of the numbers are 7, 9, 12, and 5, what is the fifth number?
(A) 7
(B) 8
(C) 9
(D) 10

14. A survey of 200 people found that 120 like coffee, 150 like tea, and 80 like both. How many people do not like either coffee or tea?
(A) 10

(B) 20
(C) 30
(D) 40

15. A dataset contains the numbers 5, 7, 9, 11, and 13. What is the median?

(A) 7
(B) 9
(C) 11
(D) 13

16. A jar contains 4 red, 5 blue, and 6 green marbles. If one marble is picked at random, what is the probability it is blue?

(A) $\frac{1}{3}$
(B) $\frac{5}{15}$
(C) $\frac{4}{15}$
(D) $\frac{2}{5}$

17. Simplify the expression: $3(x-2)+4$.

(A) $3x-2$
(B) $3x+2$
(C) $3x-4$
(D) $3x+4$

18. If x is directly proportional to y and $x=10$ when $y=2$, what is x when $y=8$?

(A) 30
(B) 40
(C) 50
(D) 60

19. If $2x+3=9$, what is the value of x?

(A) 1
(B) 2
(C) 3
(D) 4

20. A right triangle has one leg of 5 cm and a hypotenuse of 13 cm. What is the length of the other leg?

(A) 10 cm
(B) 12 cm
(C) 15 cm
(D) 14 cm