

GRE Quantitative Reasoning Practice Test-7, 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.

1. If x is a positive integer and $3x - 7 < 2x + 5$, what is the greatest possible value of x ?

- (A) 6
- (B) 8
- (C) 10
- (D) 12
- (E) 14

2. A bakery makes 120 cookies, which are divided equally among 4 boxes. Each box is sold for \$15. What is the price per cookie?

- (A) \$0.25
- (B) \$0.50
- (C) \$1.00
- (D) \$1.25
- (E) \$1.50

3. A number is decreased by 40% and the result is 72. What was the original number?

- (A) 100
- (B) 120
- (C) 150
- (D) 160

(E) 180

4. If the average (arithmetic mean) of five consecutive integers is 25, what is the largest of these integers?

- (A) 25
- (B) 26
- (C) 27
- (D) 28
- (E) 29

5. A certain job pays \$24 per hour for the first 40 hours worked in a week and 1.5 times that rate for any additional hours. If an employee earns \$1,260 in one week, how many total hours did they work?

- (A) 45
- (B) 47
- (C) 48
- (D) 50
- (E) 52

6. Solve for x :

$$\frac{2}{x} + \frac{3}{x} = \frac{10}{15}$$

- (A) 3
- (B) 6
- (C) 9
- (D) 12
- (E) 15

7. If $x^2 - 9 = 16$, what are the values of x ?

- (A) ± 5
- (B) ± 7
- (C) ± 6
- (D) ± 4
- (E) ± 3

8. Solve for y in terms of x if $4x - 5y = 20$.

- (A) $y = \frac{4x-20}{5}$
- (B) $y = \frac{20-4x}{5}$
- (C) $y = \frac{5x-20}{4}$
- (D) $y = \frac{20+4x}{5}$
- (E) $y = \frac{20+5x}{4}$

9. If $x + 1 = 3(x - 2)$, what is the value of x ?

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

(E) 5

10. For what value of k will the system of equations $2x + 3y = 12$ and $4x + ky = 24$ have no solution?

- (A) 3
- (B) 6
- (C) 9
- (D) 12
- (E) 15

11. A rectangle has a width of 6 units and a perimeter of 32 units. What is the length of the rectangle?

- (A) 8
- (B) 10
- (C) 12
- (D) 14
- (E) 16

12. In a circle with a radius of 10, what is the area of a sector with a central angle of 72 degrees?

- (A) 20π
- (B) 25π
- (C) 50π
- (D) 100π
- (E) 200π

13. A right triangle has legs of lengths 8 and 15. What is the length of the hypotenuse?

- (A) 16
- (B) 17
- (C) 18
- (D) 19
- (E) 20

14. What is the volume of a cube with a surface area of 54 square units?

- (A) 18
- (B) 27
- (C) 36
- (D) 45
- (E) 64

15. In a parallelogram, if one angle measures 70 degrees, what is the measure of an adjacent angle?

- (A) 70
- (B) 90
- (C) 100
- (D) 110

(E) 120

16. The weights of 5 dogs are 10, 12, 15, 15, and 20 pounds. What is the median weight?

(A) 12

(B) 13

(C) 15

(D) 16

(E) 17

17. If 60% of a class of 50 students passed a test, how many students did not pass?

(A) 10

(B) 15

(C) 20

(D) 25

(E) 30

18. A survey showed that 40% of respondents prefer coffee, 35% prefer tea, and the rest prefer neither. If 200 people responded, how many prefer neither?

(A) 50

(B) 60

(C) 70

(D) 80

(E) 90

19. A store sells apples in bags of 6. If a customer buys 4 bags, what is the standard deviation of the number of apples bought?

(A) 0

(B) 2

(C) 3

(D) 4

(E) 5

20. If the probability of rain on any given day is 0.3, what is the probability that it will rain exactly 2 out of the next 3 days?

(A) 0.189

(B) 0.216

(C) 0.243

(D) 0.267

(E) 0.300