

GRE 2024 Quant Practice Test 2

Time Allowed : About 3 hrs 45 mins	Maximum Score : 340 (Verbal+Quant) + 6 (AWA)	Sections : 3 Main + 1 Unscored
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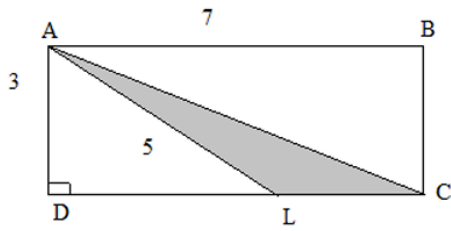
General Instructions

Read the following instructions very carefully and strictly follow them:

1. The GRE General Test has a duration of about 3 hours 45 minutes, divided into six sections (including one unscored/experimental section).
2. The test consists of the following sections:
 - **Analytical Writing Assessment (AWA)** – 2 tasks, 30 minutes each.
 - **Verbal Reasoning** – 2 sections, 20 questions each, 30 minutes per section.
 - **Quantitative Reasoning** – 2 sections, 20 questions each, 35 minutes per section.
 - **Unscored/Research Section** – May appear anytime (not counted in score).
3. Scoring Pattern:
 - Verbal Reasoning: 130–170 (in 1-point increments).
 - Quantitative Reasoning: 130–170 (in 1-point increments).
 - Analytical Writing: 0–6 (in half-point increments).
4. No negative marking is applied in the GRE. Test-takers are advised to attempt all questions.
5. Only an on-screen calculator is allowed for Quantitative Reasoning. No physical calculators, mobile devices, or electronic gadgets are permitted.
6. Breaks: A 10-minute break is provided after the third section; one-minute breaks between other sections.

QUANT PRACTICE PAPER

1. What is the area of triangle ALC in the figure given below?



- (A) 2.5
- (B) 3
- (C) 3.5
- (D) 4
- (E) 4.5

2. Alan has two more than twice as many chocolates as Alice, and half as many chocolates as does Nadia. If Alice has ‘a’ number of chocolates, then in terms of ‘a’, how many chocolates do Alan, Alice, and Nadia have?

- (A) $2a + 4$
- (B) $5a + 5$
- (C) $6a + 7$
- (D) $7a + 6$
- (E) $9a + 4$

3. Milk needs to be thinned to a ratio of 3 parts milk to 2 parts water. The milk-man has by mistake added water so that he has 8 liters of milk, which is half water and half milk. What must he add to make the proportions of the mixture correct?

- (A) 1 liter milk
- (B) 1 liter water
- (C) 2 liters milk
- (D) 1.5 liters milk
- (E) 3 liters milk

4. The width of a rectangle is $\frac{2}{3}$ times its length. If the length is calculated to be 9, what is the value of the perimeter for this rectangle?

- (A) 36
 - (B) 9
 - (C) 12
 - (D) 54
 - (E) 30
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5. A line is parallel to the y-axis and passes through the point $(2, 3)$. What is its gradient (m) and x-intercept?

- (A) $m = 0, x = (3, 0)$
 - (B) $m = \infty, x = (2, 0)$
 - (C) $m = 0, x = (2, 0)$
 - (D) $m = \infty, x = (3, 0)$
 - (E) $m = 2, x = (0, 0)$
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6. What is the equation of the new parabola created by shifting $y = x^2$, three units in the positive y-axis direction?

- (A) $y = (x + 3)^2$
 - (B) $y = x^2$
 - (C) $y = x^2 + 3$
 - (D) $3y = x^2$
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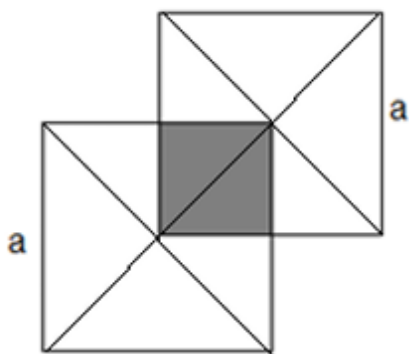
7. A sphere with diameter 1 unit is enclosed in a cube of side 1 unit each. Find the unoccupied volume remaining inside the cube.

- (A) $\frac{1}{4}$
 - (B) 2π
 - (C) $\frac{\pi}{6} - 1$
 - (D) $1 - \frac{\pi}{4}$
 - (E) $1 - \frac{\pi}{6}$
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8. The function $y = -3x^2$ is shifted 2 units towards the positive x-axis (right) and 3 units towards the positive y-axis (up). Find the resulting function.

- (A) $y = 3x^2 + 5$
 (B) $y = 3x^2$
 (C) $y = 3(x + 2)^2 + 3$
 (D) $y = 3(x - 2)^2 - 3$
 (E) $y = 3(x - 2)^2 + 3$

9. Find the shaded area when two squares with side a intersect as shown in the figure below.



- (A) $\frac{1}{8}a^2$
 (B) $\frac{1}{4}a^2$
 (C) a^2
 (D) $\frac{1}{3}a^2$
 (E) $\frac{2}{5}a^2$

10. If the largest side of a triangle is A , and the other two sides are B and C , what relation exists between them?

- (A) $A = B + C$
 (B) $A + C$
 (C) $A > |B - C|$
 (D) $|B - C|$
 (E) $A - \pi(B - C)$