

# GRE 2024 Quant Practice Test 1

<b>Time Allowed :</b> About 3 hrs 45 mins	<b>Maximum Score :</b> 340 (Verbal+Quant) + 6 (AWA)	<b>Sections :</b> 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. Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the four answer choices:**

A symbol that appears more than once in a question has the same meaning throughout the question.

$$10^x = 10,000,000,000$$

- (A) Quantity A is greater
- (B) The relationship cannot be determined from the information given
- (C) The two quantities are equal
- (D) Quantity B is greater

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**2. Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the four answer choices:**

A symbol that appears more than once in a question has the same meaning throughout the question.

$$10y + 20x = 50$$

- (A) Quantity A is greater
- (B) The relationship cannot be determined from the information given
- (C) The two quantities are equal
- (D) Quantity B is greater

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**3. Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the four answer choices:**

A symbol that appears more than once in a question has the same meaning throughout the question.

Figure is not drawn to scale

- (A) The two quantities are equal
- (B) Quantity B is greater
- (C) Quantity A is greater
- (D) The relationship cannot be determined from the information given

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**4. Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the four answer choices:**

The following table displays the income Jane's business earned and the percentage of that income she paid in taxes for the first half of the year.

Month	Income earned (\$)	Percentage paid in taxes (%)
January	10,000	10
February	50,000	30
March	20,000	20
April	10,000	10
May	30,000	20
June	90,000	40

- (A) The average of the income tax Jane paid  
 (B) 22% of Jane's average income  
 (C) Quantity B is greater  
 (D) The two quantities are equal

**5. If  $q$  is the smallest composite number greater than 2 and  $p$  is the smallest prime number less than 10, what is  $p \times q$ ?**

- (A) 4  
 (B) 2  
 (C) 1  
 (D) 0.5

**6. For which value of  $n$  is  $(1/2^n) > 1$  true?**

- (A)  $n = 1/2$   
 (B)  $n = -1/2$   
 (C)  $n = \sqrt{2}$   
 (D)  $n = 1$

**7. Lines  $l$  and  $m$  are parallel.  $O$  is the center of the circle. The measure of angle  $d$  is  $45^\circ$ . The length of line  $RS$  is  $\frac{\sqrt{2}}{2}$ . Line  $RS$  forms a right angle with line  $m$ .**

**What is the measure of angle  $a$ ?**

- (A)  $45^\circ$   
 (B)  $90^\circ$   
 (C)  $60^\circ$   
 (D)  $30^\circ$

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8. Lines  $l$  and  $m$  are parallel.  $O$  is the center of the circle. The measure of angle  $d$  is  $45^\circ$ . The length of line  $RS$  is  $\frac{\sqrt{2}}{2}$ . Line  $RS$  forms a right angle with line  $m$ .

What is the length of line  $PR$ ?

- (A)  $\sqrt{2}/2$
- (B)  $2\sqrt{2}$
- (C)  $\sqrt{2}$
- (D) 1

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9. Lines  $l$  and  $m$  are parallel.  $O$  is the center of the circle. The measure of angle  $d$  is  $45^\circ$ . The length of line  $RS$  is  $\frac{\sqrt{2}}{2}$ . Line  $RS$  forms a right angle with line  $m$ .

What is the diameter of circle  $O$ ?

- (A) 1
- (B)  $\sqrt{2}$
- (C)  $1\sqrt{2}$
- (D)  $\sqrt{2}/2$

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10. Circle  $A$  represents students who major in liberal arts at a certain university. Circle  $B$  represents students who major in the life sciences at that university, and circle  $C$  represents engineering majors at the same university. What does  $A \cup B$  represent?

- (A) Only life science students
- (B) Only liberal arts students
- (C) All liberal arts and life science students
- (D) Only the subset of liberal arts and life science double-majors

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11. Circle  $A$  represents students who major in liberal arts at a certain university. Circle  $B$  represents students who major in the life sciences at that university, and circle  $C$  represents engineering majors at the same university. What does  $A \cap B$  represent?

- (A) Only life science students
- (B) All liberal arts and life science students

- (C) Only liberal arts students
- (D) The subset of liberal arts and life science double-majors

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**12. Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the four answer choices:**

$$A \times B = (AB)^2 + (A + B)^2$$

- (A) Quantity A is greater
- (B) Quantity B is greater
- (C) The two quantities are equal
- (D) The relationship cannot be determined from the information given

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**13. The electrical engineering department at a certain graduate school in the United States (US) has a total of 36 students. The department has twice as many male students as female students and three times as many international students as students who are US citizens.**

**Quantity A:** The number of students who are US citizens

**Quantity B:** The number of female students

- (A) The relationship cannot be determined from the information given
- (B) Quantity A is greater
- (C) The two quantities are equal
- (D) Quantity B is greater

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**14. Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the four answer choices:**

R is the center of the circle below:

**Figure NOT drawn to scale**

**Quantity A:** Half the circumference

**Quantity B:** The area of triangle QRS

- (A) Quantity A is greater
- (B) Quantity B is greater

- (C) The two quantities are equal
  - (D) The relationship cannot be determined from the information given
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**15. Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the four answer choices:**

*The graph below shows the gross domestic product (GDP) in trillions of US dollars for four countries between 2000 and 2008.*

**Quantity A:** The combined GDP of Japan, China, and Canada in 2008

**Quantity B:** The GDP of the US in 2008

- (A) Quantity A is greater
  - (B) The two quantities are equal
  - (C) The relationship cannot be determined from the information given
  - (D) Quantity B is greater
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