GRE Sample Paper Set 1 with Solutions

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

General Instructions

Read the following instructions very carefully and strictly follow them:

1. The GRE General Test is 1 hour and 58 minutes long (with one optional 10-minute break) and consists of 54 questions in total.
2. The GRE exam is comprised of three sections:
   - Quantitative Reasoning: 27 questions, 47 minutes
   - Verbal Reasoning: 27 questions, 41 minutes
3. You can answer the two sections in any order.
4. As you move through a section, you can skip questions, flag them for review, and return to them later within the same section.
5. When you have answered all questions in a section, you can review your responses before time expires.
6. If there is no time remaining in the section, you will automatically be moved to your optional break screen or the next section (if you have already taken your optional break).
7. Each review screen includes a numbered list of the questions in that section and indicates the questions you flagged.
8. Clicking a question number will take you to that specific question.
9. You may change any answer within the time allowed for that section.

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1. Compare Quantity A and Quantity B.
Quantity A: The least prime number greater than 24
Quantity B: The greatest prime number less than 28

(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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2. Lionel is younger than Maria.
Quantity A: Twice Lionel's age
Quantity B: Maria's age

(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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3. Quantity A: 54% of 360
Quantity B: 150

(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.

4.

Figure 1

Quantity A: PS
Quantity B: SR

(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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5. $y = 2x^2 + 7x - 3$
Quantity A: x
Quantity B: y

(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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6. y > 4
Quantity A: $\frac{3y+2}{5}$
Quantity B: y

(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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7. Quantity A: $\frac{2^{30}-2^{29}}{2}$
Quantity B: 2^{28}

(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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8. Quantity A: $x^2 + 1$
Quantity B: $2x - 1$

(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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9. w > 1
Quantity A: $7w - 4$
Quantity B: $2w + 5$

(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.

Multiple Choice Questions

1. If 5x + 32 = 4 - 2x, what is the value of x?

(A) -4
(B) -3
(C) 4
(D) 7
(E) 12

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2. Which of the following numbers is farthest from the number 1 on the number line?

(A) -10
(B) -5
(C) 0
(D) 5
(E) 10

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3. The figure above shows the graph of the function f, defined by f(x) = $|2x| + 4$ for all numbers x. For which of the following functions g, defined for all numbers x, does the graph of g intersect the graph of f?

(A) g(x) = x - 2
(B) g(x) = x + 3
(C) g(x) = 2x - 2
(D) g(x) = 2x + 3
(E) g(x) = 3x - 2

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4. A car got 33 miles per gallon using gasoline that cost $2.95 per gallon. Approximately what was the cost, in dollars, of the gasoline used in driving the car 350 miles?

(A) $10
(B) $20
(C) $30
(D) $40
(E) $50

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5. A certain jar contains 60 jelly beans — 22 white, 18 green, 11 yellow, 5 red, and 4 purple. If a jelly bean is to be chosen at random, what is the probability that

the jelly bean will be neither red nor purple?

(A) 0.09
(B) 0.15
(C) 0.54
(D) 0.85
(E) 0.91

Multiple Choice Questions

1. Which two of the following numbers have a product that is between -1 and 0? Indicate *both* of the numbers.

(A) -20
(B) -10
(C) 2^{-4}
(D) 3^{-2}

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2. Which of the following integers are multiples of both 2 and 3?
Indicate *all* such integers.

(A) 8
(B) 9
(C) 12
(D) 18
(E) 21
(F) 36

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3. Each employee of a certain company is in either Department X or Department Y, and there are more than twice as many employees in Department X as in Department Y. The average (arithmetic mean) salary is $25,000 for the employees in Department X and $35,000 for the employees in Department Y. Which of the following amounts could be the average salary for all of the employees of the company?
Indicate *all* such amounts.

(A) $26,000
(B) $28,000
(C) $29,000
(D) $30,000

(E) $31,000
(F) $32,000
(G) $34,000

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4. Which of the following could be the units digit of 57^n, where n is a positive integer?
Indicate *all* such digits.

(A) 0
(B) 1
(C) 2
(D) 3
(E) 4
(F) 5
(G) 6
(H) 7
(I) 8
(J) 9

Numeric Entry Sample Questions

1. One pen costs $0.25 and one marker costs $0.35. At those prices, what is the total cost of 18 pens and 100 markers?

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2. Rectangle R has length 30 and width 10, and square S has length 5. The perimeter of S is what fraction of the perimeter of R?

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3. For the large cars sold at an auction that is summarized in the table above, what was the average sale price per car?

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4. A merchant made a profit of $5 on the sale of a sweater that cost the merchant $15. What is the profit expressed as a percent of the merchant's cost?
Give your answer to the nearest whole percent.

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5. Working alone at its constant rate, machine A produces k liters of a chemical in 10 minutes. Working alone at its constant rate, machine B produces k liters of the chemical in 15 minutes. How many minutes does it take machines A and B, working simultaneously at their respective constant rates, to produce k liters of the chemical?

Data Interpretation and Sample Questions

Questions 1 to 3 are based on the following data.
Annual Percent Change in Dollar Amount of Sales at Five Retail Stores from 2006 to 2008

Store	Percent Change from 2006 to 2007	Percent Change from 2007 to 2008
P	10	-10
Q	-20	9
R	5	12
S	-7	-15
T	17	-8

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1. If the dollar amount of sales at Store P was $800,000 for 2006, what was the dollar amount of sales at that store for 2008?

(A) $727,200
(B) $792,000
(C) $800,000
(D) $880,000
(E) $968,000

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2. At Store T, the dollar amount of sales for 2007 was what percent of the dollar amount of sales for 2008?
Give your answer to the nearest 0.1%.
Enter your answer in the box: [ ] %

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3. Based on the information given, which of the following statements must be true? Indicate *all* such statements.

(A) For 2008 the dollar amount of sales at Store R was greater than that at each of the other four stores.
(B) The dollar amount of sales at Store S for 2008 was 22% less than that for 2006.

(C) The dollar amount of sales at Store R for 2008 was more than 17% greater than that for 2006.
