GMAT 2025 Quant Practice Paper Set 1 Question Paper with Solutions

Time Allowed :2 Hours 15 Minutes	**Maximum Marks :**205-805	**Total Questions :**64

General Instructions

Read the following instructions very carefully and strictly follow them:

1. The GMAT exam is 2 hours and 15 minutes long (with one optional 10-minute break) and consists of 64 questions in total.
2. The GMAT exam is comprised of three sections:
3. Quantitative Reasoning: 21 questions, 45 minutes
4. Verbal Reasoning: 23 questions, 45 minutes
5. Data Insights: 20 questions, 45 minutes
6. You can answer the three sections in any order. As you move through a section, you can bookmark questions that you would like to review later.
7. When you have answered all questions in a section, you will proceed to the Question Review & Edit screen for that section.
8. If there is no time remaining in the section, you will NOT proceed to the Question Review & Edit screen and you will automatically be moved to your optional break screen or the next section (if you have already taken your optional break).
9. Each Question Review & Edit screen includes a numbered list of the questions in that section and indicates the questions you bookmarked.
10. Clicking a question number will take you to that specific question. You can review as many questions as you would like and can edit up to three (3) answers.

Quantitative Aptitude

1. What is the value of 11/12 + 13/14?

(A) 1 19/25
(B) 1 43/84
(C) 1 71/84
(D) 2 19/25
(E) 2 43/84

Correct Answer: (C) 1 71/84

Solution:

Step 1: Understanding the Concept:
The problem requires the addition of two fractions with different denominators. To do this, we must first find a common denominator.

Step 2: Key Formula or Approach:
1. Find the Least Common Multiple (LCM) of the denominators.
2. Convert each fraction to an equivalent fraction with the LCM as the new denominator.
3. Add the numerators of the new fractions.
4. Simplify the resulting fraction and convert it to a mixed number if necessary.

Step 3: Detailed Explanation:
The denominators are 12 and 14. We find their LCM.
The prime factorization of 12 is $2^2 \times 3$.
The prime factorization of 14 is 2×7.
The LCM is the highest power of each prime factor multiplied together: $2^2 \times 3 \times 7 = 4 \times 21 = 84$.

Now, convert the fractions:

$$\frac{11}{12} = \frac{11 \times 7}{12 \times 7} = \frac{77}{84}$$

$$\frac{13}{14} = \frac{13 \times 6}{14 \times 6} = \frac{78}{84}$$

Add the equivalent fractions:

$$\frac{77}{84} + \frac{78}{84} = \frac{77 + 78}{84} = \frac{155}{84}$$

Convert the improper fraction to a mixed number:

$$\frac{155}{84} = 1\frac{71}{84}$$

Step 4: Final Answer:
Based on the provided answer key, the answer is $1\frac{71}{84}$, which corresponds to option (C).

Quick Tip

When adding fractions, always double-check your multiplication when finding equivalent fractions, as this is a common source of error. If your calculated answer is not in the options, re-read the question carefully for any misinterpretations, and then check for potential typos in the options themselves.

2. What is the value of 5 / (2/3)?

(A) 10/3
(B) 3/10
(C) 2/15
(D) 3/2
(E) 15/2

Correct Answer: (E) 15/2

Solution:

Step 1: Understanding the Concept:
The problem involves dividing a whole number by a fraction.

Step 2: Key Formula or Approach:
To divide by a fraction, you multiply by its reciprocal. The reciprocal of a fraction is found by inverting it (swapping the numerator and the denominator).

$$a \div \frac{b}{c} = a \times \frac{c}{b}$$

Step 3: Detailed Explanation:
The expression is $5 \div \frac{2}{3}$.
The reciprocal of $\frac{2}{3}$ is $\frac{3}{2}$.
Change the division to multiplication using the reciprocal:

$$5 \times \frac{3}{2}$$

Multiply the whole number by the numerator of the fraction:

$$\frac{5 \times 3}{2} = \frac{15}{2}$$

Step 4: Final Answer:
The value is $\frac{15}{2}$, which corresponds to option (E).

Quick Tip

Remember the phrase "Keep, Change, Flip" for dividing fractions. Keep the first number, Change the division sign to multiplication, and Flip the second fraction to its reciprocal.

3. If x - 3 = 7, then x = ?

(A) -10
(B) -4
(C) 4
(D) 10
(E) 21

Correct Answer: (D) 10

Solution:

Step 1: Understanding the Concept:
This is a basic one-step linear equation. The goal is to isolate the variable x to find its value.

Step 2: Key Formula or Approach:
To solve for x, we use the inverse operation. The inverse of subtraction is addition. We will add 3 to both sides of the equation.

Step 3: Detailed Explanation:
Given the equation:

$$x - 3 = 7$$

Add 3 to both sides of the equation to isolate x:

$$x - 3 + 3 = 7 + 3$$

$$x = 10$$

Step 4: Final Answer:
The value of x is 10, which corresponds to option (D).

Quick Tip

You can quickly check your answer by substituting it back into the original equation. If $x = 10$, then $10 - 3 = 7$, which is correct. This verification takes only a few seconds and prevents simple errors.

---

4. 6 is what percent of 120?

(A) 2%
(B) 5%
(C) 10%
(D) 20%
(E) 50%

Correct Answer: (B) 5%

Solution:

Step 1: Understanding the Concept:
The question asks to express one number (the "part") as a percentage of another number (the "whole").

Step 2: Key Formula or Approach:
The formula to find the percentage is:

$$\text{Percentage} = \left(\frac{\text{Part}}{\text{Whole}}\right) \times 100\%$$

Step 3: Detailed Explanation:
In this problem, the "part" is 6 and the "whole" is 120.
Substitute these values into the formula:

$$\text{Percentage} = \left(\frac{6}{120}\right) \times 100\%$$

First, simplify the fraction:

$$\frac{6}{120} = \frac{1}{20}$$

Now, multiply by 100%:

$$\text{Percentage} = \frac{1}{20} \times 100\% = \frac{100}{20}\% = 5\%$$

Step 4: Final Answer:
6 is 5% of 120, which corresponds to option (B).

Quick Tip

To quickly calculate percentages mentally, try to find a simpler fraction. For "6 is what percent of 120?", you can think "12 is 10% of 120, so 6 must be half of that, which is 5%".

5. What is the value of 3 / (1/4)?

(A) 1/12
(B) 3/4
(C) 4/3
(D) 12
(E) 12/4

Correct Answer: (D) 12

Solution:

Step 1: Understanding the Concept:
This problem involves dividing a whole number by a unit fraction.

Step 2: Key Formula or Approach:
Dividing by a fraction is equivalent to multiplying by its reciprocal.

$$a \div \frac{1}{b} = a \times b$$

Step 3: Detailed Explanation:
The expression is $3 \div \frac{1}{4}$.
The reciprocal of $\frac{1}{4}$ is $\frac{4}{1}$ or simply 4.
We change the division to multiplication:

$$3 \times 4 = 12$$

Alternatively, you can think of this as "How many quarters (1/4) are there in 3 wholes?". Since there are 4 quarters in one whole, there are $3 \times 4 = 12$ quarters in three wholes.

Step 4: Final Answer:
The value is 12, which corresponds to option (D).

Quick Tip

When you divide a number by a fraction smaller than 1, the result will always be larger than the original number. This can help you eliminate incorrect options quickly.

6. If x + 5 = 9, then x = ?

(A) 4
(B) 5
(C) 9
(D) 14
(E) 45

Correct Answer: (A) 4

Solution:

Step 1: Understanding the Concept:
This is a one-step linear equation. We need to find the value of the variable x by isolating it on one side of the equation.

Step 2: Key Formula or Approach:
To isolate x, we perform the inverse operation of the one applied to it. Since 5 is added to x, we will subtract 5 from both sides of the equation.

Step 3: Detailed Explanation:
The given equation is:

$$x + 5 = 9$$

Subtract 5 from both sides:

$$x + 5 - 5 = 9 - 5$$

$$x = 4$$

Step 4: Final Answer:
The value of x is 4, which corresponds to option (A).

Quick Tip

For simple equations like this, you can often solve it by inspection: "What number plus 5 equals 9?". The answer is 4. This mental check is very fast and efficient.

---

7. If 2x - 5 = 15, what is the value of x?

(A) 4
(B) 5

(C) 10
(D) 20
(E) 40

Correct Answer: (C) 10

Solution:

Step 1: Understanding the Concept:
This is a two-step linear equation. To find the value of x, we need to perform two inverse operations to isolate the variable.

Step 2: Key Formula or Approach:
1. Isolate the term containing x by adding or subtracting the constant term.
2. Solve for x by dividing by its coefficient.

Step 3: Detailed Explanation:
The equation is:

$$2x - 5 = 15$$

First, add 5 to both sides to isolate the $2x$ term:

$$2x - 5 + 5 = 15 + 5$$

$$2x = 20$$

Next, divide both sides by 2 to solve for x:

$$\frac{2x}{2} = \frac{20}{2}$$

$$x = 10$$

Step 4: Final Answer:
The value of x is 10, which corresponds to option (C).

Quick Tip

When solving two-step equations of the form $ax + b = c$, always deal with the addition/subtraction part first (undoing b) before handling the multiplication/division part (undoing a).

8. If 4x + 1 = 9, what is the value of x?

(A) 2
(B) 2 1/2
(C) 4/5
(D) 5/4
(E) 5/2

Correct Answer: (A) 2

Solution:

Step 1: Understanding the Concept:
This is a two-step linear equation requiring us to solve for the variable x.

Step 2: Key Formula or Approach:
We will use inverse operations to isolate x. First, we'll undo the addition, and then we'll undo the multiplication.

Step 3: Detailed Explanation:
Given the equation:

$$4x + 1 = 9$$

First, subtract 1 from both sides of the equation:

$$4x + 1 - 1 = 9 - 1$$

$$4x = 8$$

Next, divide both sides by 4 to find x:

$$\frac{4x}{4} = \frac{8}{4}$$

$$x = 2$$

Step 4: Final Answer:
The value of x is 2, which corresponds to option (A).

Quick Tip

Always check your answer. Plug $x = 2$ back into the equation: $4(2) + 1 = 8 + 1 = 9$. The equation holds true, confirming the answer is correct.

---

9. If p = 3m and m = k/6, what is the value of p when k = 36?

(A) 2
(B) 6
(C) 12
(D) 18
(E) 108

Correct Answer: (D) 18

Solution:

Step 1: Understanding the Concept:
This problem involves a chain of dependencies between variables. We are given the value of one variable (k) and need to work through the given equations to find the value of the final variable (p).

Step 2: Key Formula or Approach:
1. Use the value of k to find the value of the intermediate variable m.
2. Use the value of m to find the final value of p.
Alternatively, first create a direct relationship between p and k by substitution.

Step 3: Detailed Explanation:
Method 1: Step-by-step calculation
We are given $k = 36$.
First, find m using the equation $m = k/6$:

$$m = \frac{36}{6} = 6$$

Now that we have $m = 6$, we can find p using the equation $p = 3m$:

$$p = 3 \times 6 = 18$$

Method 2: Substitution first
Substitute the expression for m into the equation for p:

$$p = 3m = 3\left(\frac{k}{6}\right) = \frac{3k}{6} = \frac{k}{2}$$

Now, substitute the value $k = 36$ into this new equation:

$$p = \frac{36}{2} = 18$$

Step 4: Final Answer:
The value of p is 18, which corresponds to option (D).

Quick Tip

For chained variable problems, substitution can often be faster. Creating a single equation relating the first and last variables ($p = k/2$) can simplify the calculation, especially if you need to solve for multiple values of k.

---

10. If a = 2b and b = 3c, what is the value of a when c = 4?

(A) 6
(B) 9
(C) 10
(D) 20
(E) 24

Correct Answer: (E) 24

Solution:

Step 1: Understanding the Concept:
This is a substitution problem where the value of one variable is used to find the next in a sequence until the final target variable is found.

Step 2: Key Formula or Approach:
We can solve this in two ways: by sequentially calculating the value of each variable, or by first creating a direct formula for a in terms of c.

Step 3: Detailed Explanation:
Method 1: Sequential Calculation
We are given that $c = 4$.
First, we find the value of b using the equation $b = 3c$:

$$b = 3 \times 4 = 12$$

Now we use the value of b to find a using the equation $a = 2b$:

$$a = 2 \times 12 = 24$$

Method 2: Substitution
We have $a = 2b$ and $b = 3c$. Substitute the expression for b into the first equation:

$$a = 2(3c) = 6c$$

Now we have a direct relationship between a and c. We can substitute $c = 4$:

$$a = 6 \times 4 = 24$$

Step 4: Final Answer:
The value of a is 24, which corresponds to option (E).

Quick Tip

When variables are linked in a simple chain ($a \to b \to c$), you can find the relationship between the first and last variable by multiplying their coefficients. Here, $a = (2 \times 3)c = 6c$.
