

Generated Questions - 20250403_140853

Question 1: What is the value of 7 multiplied by 8?

- A. 54
- B. 56
- C. 64
- D. 48

Correct Answer: B

Explanation: 7 multiplied by 8 equals 56.

Difficulty: easy

Metadata: topic: Arithmetic, subtopic: Multiplication, learning objective: Understand basic multiplication

Question 2: What is the square root of 144?

- A. 10
- B. 12
- C. 14
- D. 16

Correct Answer: B

Explanation: The square root of 144 is 12 because 12 times 12 equals 144.

Difficulty: medium

Metadata: topic: Algebra, subtopic: Square Roots, learning objective: Calculate square roots

Question 3: What is the value of 15% of 200?

- A. 30
- B. 25
- C. 35
- D. 40

Correct Answer: A

*Explanation: 15% of 200 is calculated as $(15/100) * 200 = 30$.*

Difficulty: medium

Metadata: topic: Percentage, subtopic: Calculating Percentages, learning objective: Understand how to calculate percentages

Question 4: What is the value of the expression $3 + 7 \times 2$?

- A. 17
- B. 10
- C. 14
- D. 13

Correct Answer: C

Explanation: According to the order of operations (PEMDAS/BODMAS), you must perform multiplication before addition. So, $7 \times 2 = 14$, and then $3 + 14 = 17$.

Difficulty: medium

Metadata: topic: Arithmetic, subtopic: Order of Operations, learning objective: Evaluate expressions using the correct order of operations.

Question 5: If a triangle has angles of 30 degrees and 60 degrees, what is the measure of the third angle?

- A. 90 degrees
- B. 60 degrees
- C. 120 degrees
- D. 30 degrees

Correct Answer: A

Explanation: The sum of the angles in a triangle is always 180 degrees. Therefore, the third angle is $180 - (30 + 60) = 90$ degrees.

Difficulty: easy

Metadata: topic: Geometry, subtopic: Triangle Angles, learning objective: Understand the properties of triangle angles.

Question 6: What is the greatest common divisor (GCD) of 48 and 180?

- A. 12
- B. 24

- C. 6
- D. 18

Correct Answer: A

Explanation: The GCD of two numbers is the largest number that divides both of them without leaving a remainder. The factors of 48 are 1, 2, 3, 4, 6, 8, 12, 16, 24, 48 and the factors of 180 are 1, 2, 3, 4, 5, 6, 9, 10, 12, 15, 18, 20, 30, 36, 60, 90, 180. The largest common factor is 12.

Difficulty: medium

Metadata: topic: Number Theory, subtopic: Greatest Common Divisor, learning objective: Find the GCD of two integers.

Question 7: What is the value of 7 multiplied by 6?

- A. 42
- B. 36
- C. 48
- D. 54

Correct Answer: A

*Explanation: The product of 7 and 6 is calculated as $7 * 6 = 42$.*

Difficulty: easy

Metadata: topic: Arithmetic, subtopic: Multiplication, learningObjective: To understand and apply multiplication of whole numbers.

Question 8: What is the area of a rectangle with a length of 5 units and a width of 3 units?

- A. 15 square units
- B. 8 square units
- C. 10 square units
- D. 18 square units

Correct Answer: A

*Explanation: The area of a rectangle is calculated as length multiplied by width: $5 * 3 = 15$.*

Difficulty: medium

Metadata: topic: Geometry, subtopic: Area Calculation, learningObjective: To calculate the area of a rectangle.

Question 9: If $x + 5 = 12$, what is the value of x ?

- A. 7
- B. 8
- C. 6
- D. 5

Correct Answer: A

Explanation: To find x , subtract 5 from both sides: $x = 12 - 5 = 7$.

Difficulty: easy

Metadata: topic: Algebra, subtopic: Linear Equations, learningObjective: To solve basic linear equations.

Question 10: What is the value of 7 multiplied by 8?

- A. 54
- B. 56
- C. 64
- D. 48

Correct Answer: B

Explanation: Multiplication of 7 and 8 equals 56, which can be verified by adding 7 to itself 8 times.

Difficulty: easy

Metadata: topic: Mathematics, subtopic: Multiplication, learning_objective: To evaluate basic multiplication problems.