

Multiple Choice Questions

1. Which property states that $a + b = b + a$ for all integers a and b ?

- A. Associative property
- B. Distributive property
- C. Commutative property
- D. Closure property

****Answer: C****

2. What is the additive identity for integers?

- A. 1
- B. -1
- C. 0
- D. The integer itself

****Answer: C****

3. What is the result of multiplying a positive integer by a negative integer?

- A. A positive integer
- B. A negative integer
- C. Zero
- D. The original positive integer

****Answer: B****

4. What is the value of $(-1) \times a$, where a is any integer?

- A. a
- B. 1
- C. $-a$
- D. 0

****Answer: C****

5. Division of a negative integer by another negative integer gives what type of quotient?

- A. A negative quotient
- B. A zero quotient
- C. A positive quotient
- D. Undefined

****Answer: C****

Short Answer Questions

1. What are integers said to be under addition because the sum of two integers is always an integer?

2. What is the value of $a \div 1$ for any integer a ?

3. What is the value of $a \div 0$?

Long Answer Questions

1. Explain the differences in multiplication and division of integers, specifically describing how the signs of the numbers being multiplied or divided affect the sign of the answer. Use examples to illustrate your points.