

OBJECTIVES

- Identify applications of integer operations

1. What properties did the set of whole number have?
 - A. Closure (Addition & Multiplication)
 - B. Associative
 - C. Commutative
 - D. Distributive (of Multiplication over addition & over subtraction)
 - E. Additive identity
 - F. Multiplicative identity
2. Are these properties retained if we extend the number system from the whole numbers to the integers?

If x , y , and z are integers, write the rule for the properties of integers

3. Are there any new properties that hold for integers that did not hold for whole numbers?

4. Common Error Patterns: A child performs the following computations:

$$-6 \times 5 = -30 \qquad -5 \times 6 = 30 \qquad -8 \times 4 = -32$$

What do you expect the child to answer for $-4 \times 6 = \underline{\hspace{2cm}}$.

Describe the child's error pattern.

How can you help this child?