Section 1.3: Subtraction with Real Numbers

Objectives

- Find the additive inverse (opposite) of a real number.
- Subtract real numbers.
- Find the change in value between two numbers.
- Find the net change for a set of numbers.

Instruct

1. What is the additive inverse (opposite) of -8?

2. On slide 7 of "Instruct" the screen reads, "… to subtract b from a, add the _____ of b to a.

3. "In practice, the notation, a-b is thought of as _____ of _____ numbers." So, we can rewrite 5 – 13 as 5 + (-13) AND vice versa.

4. "To find the **change in value** of two numbers, take the final value and _____ the beginning value.

5. Perform the indicated operations: $3-(^{-}5)-9$

6. Is x = $^{-}4$ the solution to the equation: $^{-}5+x=^{-}9$ **YES/NO**

Section 1.4: Multiplication and Division with Real Numbers

Objectives

- Multiply real numbers.
- Divide real numbers.
- Calculate the average (or mean) of a set of numbers.

Instruct

7. The product of a positive number and a negative number will be _____ .

8. The product of two negative numbers is _____.

9. a) $0\cdot x=$ _____ for any values of x. b) $\frac{x}{0}$: Division by _____ is UNDEFINED.

10. The quotient of two numbers with opposite signs is **POSITIVE**; **NEGATIVE** or **DEPENDS**.

11. The quotient of two numbers with the same sign is **POSITIVE**; **NEGATIVE** or **DEPENDS.**

12. Describe how to find the average of five numbers?

13. Find the product: 3 • 4 • 0 = _____

14. Find the product: (-3)(2) = _____

15. Find the average of the following 5 numbers: -3, 5, 8, 2, 3

Section 1.8: Order of Operations

Objectives

- Follow the rules for order of operations to evaluate expressions.

Instruct

1. In the mnemonic PEMDAS, what does each letter stand for? (List both the mnemonic and the mathematical operation)

P =

E =

M = D =

A = S =

2. Since M comes before D, does that mean we always multiply before we divide? Explain.

3. Evaluate using the proper order of operation.

a) $15 \div 3(5-2) =$

b] $20 \cdot 2 \div 2^2 + 5(-2) =$

c) $16 \cdot 3 \div (2^2 - 5) =$

d) $5 - 3(2-8) - 4^2 =$