Math 45 Properties of Real Numbers (1.6)

Objectives:

1. Identify commutative, associative, inverse, and identity properties of addition and multiplication.
2. Identify the properties of zero.

State the property of real numbers that is being illustrated.

1) $8 + 1 + (-8)$ is equivalent to $8 + (-8) + 1$

2) $30.2 \cdot 0 = 0$

3) $13 \cdot 48 \cdot \frac{7}{2} = 13 \cdot \frac{7}{2} \cdot 48$

4) $3 \cdot 1 = 3$

5) $\frac{1}{6} \cdot 6 = 1$

6) $(2 \cdot 8) \cdot 9 = 2 \cdot (8 \cdot 9)$

7) $3 + 0 = 3$

8) $\frac{8}{7} \cdot \frac{7}{8} = 1$

9) $15 + (3 + 2) = (15 + 3) + 2$

10) $5 + (-5) = 0$

11) $7 \cdot 4 = 4 \cdot 7$

1) commutative property of addition
2) multiplication property of zero
3) commutative property of multiplication
4) multiplicative identity property
5) multiplicative inverse property
6) associative property of multiplication
7) additive identity property
8) multiplicative inverse property
9) associative property of addition
10) additive inverse property
11) commutative property of multiplication