Pre-Algebra B                    Name/Date

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

# WS 5.1 – Properties of the Real Numbers

State the property of real numbers that is illustrated.  All variables represent real numbers.

1. $v(3t) = (3t)v$    **Commutative Property of Multiplication**

2. $(25x)y = 25(xy)$   **Associative Property of Multiplication**

3. $4x + 13y = 13y + 4x$   **Commutative Property of Addition**

4. $2.3 + x = x + 2.3$   **Commutative Property of Addition**

5. $(2 + 3) + 5 = 2 + (3 + 5)$   **Associative Property of Addition**

6. $(3 + a) + b = 3 + (a + b)$   **Associative Property of Addition**

7. $x\left(\frac{1}{x}\right) = 1$   **Multiplicative Inverse Property**

8. $\frac{x}{3} \cdot \frac{3}{x} = 1$   **Multiplicative Inverse Property**

9. $-7 + 7 = 0$   **Additive Inverse Property**

10. $0 = 2x + (-2x)$   **Additive Inverse Property**

11. $1 \cdot 3x = 3x$   **Identity Property of Multiplication  (Multiplicative Identity Property)**

12. $63 \cdot 1 = 63$   **Identity Property of Multiplication  (Multiplicative Identity Property)**

13. $-5x + 0 = -5x$   **Identity Property of Addition  (Additive Identity Property)**

14. $2(3 + 4) = 2 \cdot 3 + 2 \cdot 4$   **Distributive Property**

15. $5(x + y) = 5x + 5y$   **Distributive Property**

16. $4ab = 4ba$   **Commutative Property of Multiplication**

17. $5 + 3 + 4 = 4 + 5 + 3$   **Commutative Property of Addition**

18. $\frac{7}{8} \cdot \frac{8}{7} = 1$   **Multiplicative Inverse Property**