Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date \_\_\_\_\_\_\_\_\_\_ Class\_\_\_\_\_\_\_\_\_

 **Distributive Property**

**Step 1:** Distribute the 10 to the 2 and then the 4 10(2+4)

**Step 2:** Multiply factors in each parentheses (10 x *2*) + (10 x 4)

**Step 3**: Rewrite the expression as a sum of products 20 + 40

**Step 4:** Add the products together. = 80

**Directions: Use the distributive property to simplify each expression.**

1. **10(2+ 5) 2. 5(9+5)**

(\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_)

 \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_ \_\_\_\_\_\_ + \_\_\_\_\_\_\_

 = \_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_

**3. 12 (8+ 9) 4. 9(9x4)**

(\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_)

 \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_

 = \_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_

**5. 6 (12+4) 6. 10(2+4)**

(\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_)

 \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_

 = \_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_

**7. 11(4+7) 8. 13(9+6)**

(\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_)

 \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_

 = \_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_

**9. 8(5+7) 10. 11(8+2)**

(\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_)

 \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_

 = \_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_

**11. 2(9+5) 12. 6(3+5)**

(\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_) + (\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_)

 \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_

 = \_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_

**13. (6x 5) + ( 6x 6) 14. (7x4) + (7x7)**

 \_\_\_\_\_\_\_(\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_) \_\_\_\_\_\_\_(\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_)

**15. (9x3) + (9x8) 16. (2x5) + (2x10)**

 \_\_\_\_\_\_\_(\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_) \_\_\_\_\_\_\_(\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_)

**17. (8x4) + (8x8) 18. (3x4) + (3x6)**

 \_\_\_\_\_\_\_(\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_) \_\_\_\_\_\_\_(\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_)