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

**The Distributive Property,** HW #\_\_\_\_\_\_\_\_\_\_\_\_\_

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

**1. 10(3 + 6) 2. 8(3 + 2)**

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

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

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

**3. 6(2 + 1) 4. 7(5 + 4)**

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

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

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

**Directions: Create an expression that is equivalent according to the distributive property.**

**24 + 36 16 + 20**

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

**20 + 40 15 + 25**

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

**Challenge Question:**

The rectangle below represents Chris and Tara’s backyard. They have a garden on the right side. Based on the dimensions shown. Write an expression to determine the total area of the whole backyard.

8

5

15

Expression:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Determine the total area:

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_