Objective:

Vocabulary:

	Definition	Example
Distributive Property		

Example 1: Use the distributive property to simplify.

a) $9(8y + 2)$

b) $-4(5m + 6)$

c) $-8(-3 + y)$

d) $(7y - 3)(2)$

e) $11(5a - 6b + 1)$

f) $\frac{1}{2}(4x + 12)$

g) $7(x - 3y + z - 4)$

h) $-(9 - 3x)$

i) $(6y - 12)(-3)$

Example 2: A ski resort makes snow using a snow fan that costs $250 per day to operate. It also has a lift that has a daily operation cost of $450. Write and simplify an expression that represents the cost to run both the fan and lift for a week.

Example 3: Charlie simplifies the expression as follows. Explain and correct his error:

$$-5(7x + 6y - 9) = -35x + 6y - 9$$

Distributive Property

Name ____________________

Period _______

Use the distributive property to simplify.

1) $3(x - 8) =$ ____________________

2) $4(y + 12) =$ ____________________

3) $10(z - 9) =$ ____________________

4) $5(3a + 4b) =$ ____________________

5) $-6(2r + 4t + 7u) =$ ____________________

6) $-(x + 7y - z) =$ ____________________

7) $-4(g - 3h - 5m) =$ ____________________

8) $-3(4a + 9b - 6c) =$ ____________________

9) $3(2f - 7g + 4h) =$ ____________________

10) $-4(5r + 3s - 6t) =$ ____________________

11) $-2(-5m + 2n - 6p) =$ ____________________

12) $-7(2a - 6b - 8c) =$ ____________________

13) $-8(-5t + 7u - 3v) =$ ____________________

14) $-(2f - 4g + 3h) =$ ____________________

15) $-7(9x + 5y + 4z) =$ ____________________

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Distributive Property

Name ______________________________

Period __________

Simplify by distributing.

1) $3(2x-4)$ ______________________________

2) $5(5a+3b-8c)$ ______________________________

3) $7(6g+4h-3j+5)$ ______________________________

4) $10(2w-x-5y+3z+9)$ ______________________________

5) $6(2x-3y+7)$ ______________________________

6) $-5(4x-2y+z)$ ______________________________

7) $-9(-4a+3b+7c-2)$ ______________________________

8) $7(4p-2q-8r+1)$ ______________________________

9) $-8(9r+2s-8t-7)$ ______________________________

10) $-(-5a+2b-8c+9)$ ______________________________

11) $12(4x-9y+12z-25)$ ______________________________

12) $-15(8a-12b+15c-d+4)$ ______________________________

13) $5(2a-4b+7c-1)$ ______________________________

14) $-3(2r+5s-9t-u)$ ______________________________

15) $-6(-4w+9x-4y-z+7)$ ______________________________