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*I can **use the distributive property** to **simplify expressions**.*

Review:

1.) Fill in the blank(s).

$$3(x + 7) = \underline{3x} + \underline{21}$$

2.) Fill in the blank(s).

$$\underline{4}(-3x + 6) = -12x + 24$$

Distribute to Simplify

Step 1: Get rid of ___parenthesis___ first by ___distributing___

Step 2: Identify ___like terms___

Step 3: Combine to ___simplify___

Simplify the following expressions.

1.) $3(b + 9) + 10$

$$3b + 27 + 10$$
$$3b + 37$$

2.) $-(a - 9) + 7 - 3a$

$$-a + 9 + 7 - 3a$$
$$-4a + 16$$

3.) $0.2(c + 8) + 4.5c + 7.3$

$$0.2c + 1.6 + 4.5c + 7.3$$
$$4.7c + 8.9$$

4.) $\frac{3}{4}y - 7 + \frac{1}{2}(y + 8)$

$$3/4y - 7 + 1/2y + 4$$
$$1\frac{1}{4}y - 3$$

Test Examples:

1.) What is the value of c when the expression $21.2x + c$ is equivalent to $5.3(4x - 2.6)$?

$$c = -13.78$$

2.) What is the value of b when the expression $27x + b$ is equivalent to $3(9x - 3.5)$?

$$b = -10.5$$

Distributing Negative

1.) $(4a + 5) - (3a + 10)$

$$4a + 5 - 3a - 10$$
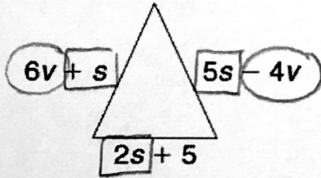
$$a - 5$$

2.) $(2b + 6) - (9b - 5)$

$$2b + 6 - 9b + 5$$

$$-7b + 11$$

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*I can **find the area and perimeter of shapes** by **simplifying expressions.***

1.) Find the perimeter.

$6v + s$ $5s - 4v$
$2s + 5$
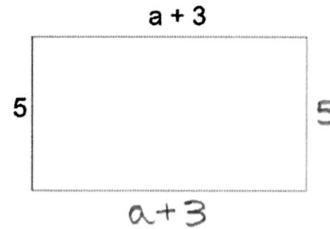
$$2v + 8s + 5$$

2.) Find the perimeter. $2a + 16$

$a + 3$

5 5

$a + 3$

Find the area. $5a + 15$

$$5(a + 3)$$