

## Integer Practice Warm-Up

$$1. \quad -8 + 5 \quad \underline{-3}$$

$$2. \quad 12 - 13 \quad \underline{-1}$$

$$3. \quad -4 + (-4) \quad \underline{-8}$$

$$4. \quad -3 - 7 \quad \underline{-10} \quad 7.$$

$$5. \quad 12 + 6 \quad \underline{18} \quad 8.$$

$$6. \quad -9 - (-8) \quad \underline{-1} \quad 9.$$

$$5 + (-16) \quad \underline{-11}$$

$$-8 - 9 \quad \underline{-17}$$

$$13 - 21 \quad \underline{-8}$$

Determine whether the terms are **LIKE** or **UNLIKE** terms.  
Drag the correct word over the terms.

-4x and -10x

13xy and 5y

$5x^2$  and 9x

$9x^2y$  and  $4x^2y$

$3xy^2$  and  $7x^2y$

17ab and -21ab

**LIKE**

**UNLIKE**

**Complete the following problems.**

The expressions on the right have had their like terms combined. Match each expression on the left with an expression on the right. When done move the red check inside the green box to reveal the answers.

1.   $8x - 3x$

a.  $5x^2y + 2xy^2$



2.   $3x + 9y - 5x$

b.  $5x$

3.   $-4x - 5x - 7xy$

c.  $3x + 9y$

4.   $6xy + 4yz - 3xy + yz$

d.  $3xy + 5yz$

5.   $7x^2y - 2x^2y + 5xy^2 - 3xy^2$

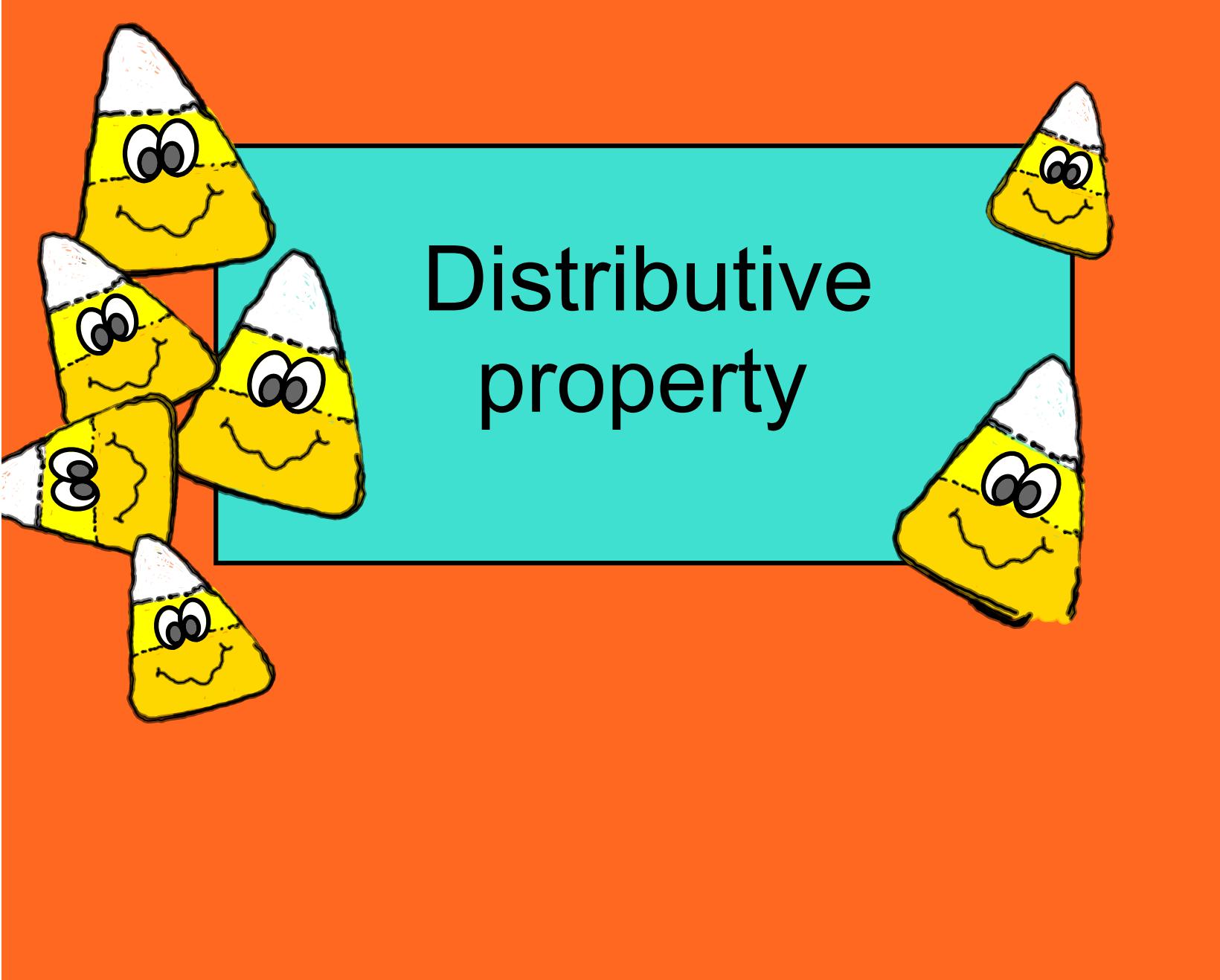
e.  $-2x + 9y$

6.   $-4x - 7xy + 8y$

f.  $-4x - 7xy + 8y$

7.   $8x + 9y - 5x$

g.  $-9x - 7xy$

A group of six cartoon candy corn characters with faces and white eyes are arranged around a teal rectangular frame. The characters are yellow with white stripes and have various expressions. One character is peeking from behind the frame's left edge, another is behind the top edge, one is on the right edge, two are on the bottom edge, and one is positioned above the top edge.

# Distributive property

Distribute in math means to give to each number

$$8(5 + 3)$$

$$8(5 + 3) = 8(5) + 8(3)$$


Rewrite each using the distributive property:

a)  $2 (\underline{6 + 4}) =$

b)  $3 (4_x + 2_x)$

c)  $(7_x + 3) 4$

d)  $(8_x + 1) 3_x$

$$e) \ 7(x + c)$$

$$f) \ y(4 + 2)$$

$$g) \ x(2x + 3)$$

h)  $2(x-3) =$

i)  $y(2 - y^3) =$

j)  $3x(-2x - 4) =$

**With negatives.... follow the integer rules!**

k)  $-2(2 + 3)$

l)  $-4(3x + 4)$

m)  $-3x(-4 + 2)$

n)  $3x(-5x - 4y)$

o)  $-2x^2(-2x - (-3))$

p)  $4x(9y - (-8))$

## The commutative and distributive properties

1

$$3(x + 3) + 7x$$

2

3

4

5

## Apply the distributive property to simplify like terms

$$5(4 + x) - 2x$$

$$3(x + 2y) - 6y - 3x$$

HINT

$$8y - 4y + 4(y - 2)$$



HINT

$$9x - 4(x + 2)$$

HINT