

NEW WARM UPS!

- Grab new warm ups from the middle of the table. Put your name on these and keep them in your binder until the end of the week.



COMBO MEALS

- Suppose you can buy a combo meal that includes 2 tacos and a soda.



- What if you wanted **THREE** of these combo meals??? How could you show that?



DISTRIBUTIVE PROPERTY

one combo meal

$$3 \left(2 \text{ 🌮} + \text{ 🍷} \right) = 6 \text{ 🌮} + 3 \text{ 🍷}$$

$$3(2t + d) = 6t + 3d$$



DISTRIBUTIVE PROPERTY

$$5(x + 3) - 7$$

$$5x + 15 - 7 \rightarrow 5x + 8$$

$$9(a - 3) - 4$$

$$9a - 27 - 4 \rightarrow 9a - 31$$

$$4a - (a - 1)$$


$$4a - a + 1 \rightarrow 3a + 1$$

$$5x - (x + 1) - 2x$$

$$(5x - x) - 1 - 2x \rightarrow 2x - 1$$



DISTRIBUTE AND SIMPLIFY

$$(x + 1) - 1(x + 2)$$


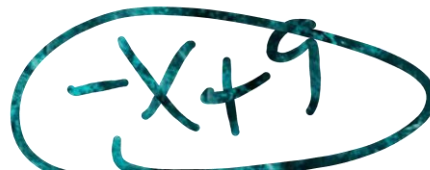
$$x + 1 - x - 2$$

$$-1$$


$$2x + 3 - 1(2x + x - 6)$$

$$2x + 3 - 2x - x + 6$$

$$9 - x$$

$$-x + 9$$




EQUATIONS

- In an expression, the variable could represent **ANYTHING!!!**

$$3x - 1$$

- In an equation, there is only **ONE** number the variable could be. (Usually)
- To **SOLVE** an equation is to find which value of the variable makes the equation true.

$$3x - 1 = 17$$

$$x = 6$$



SOLVE EACH EQUATION

$$x + 6 = 11$$

$$\begin{array}{r} -6 \\ -6 \end{array}$$

$$x = 5$$

$$\frac{4x}{4} = \frac{36}{4}$$

$$x = 9$$



SOLVE EACH EQUATION

$$8x - 10 = 22$$

$$+ 10 \quad + 10$$

$$\frac{8x}{8} = \frac{32}{8}$$

$$x = 4$$

$$2x + 5 = 20$$

$$-5 \quad -5$$

$$\frac{2x}{2} = \frac{15}{2}$$

$$x = 7.5$$



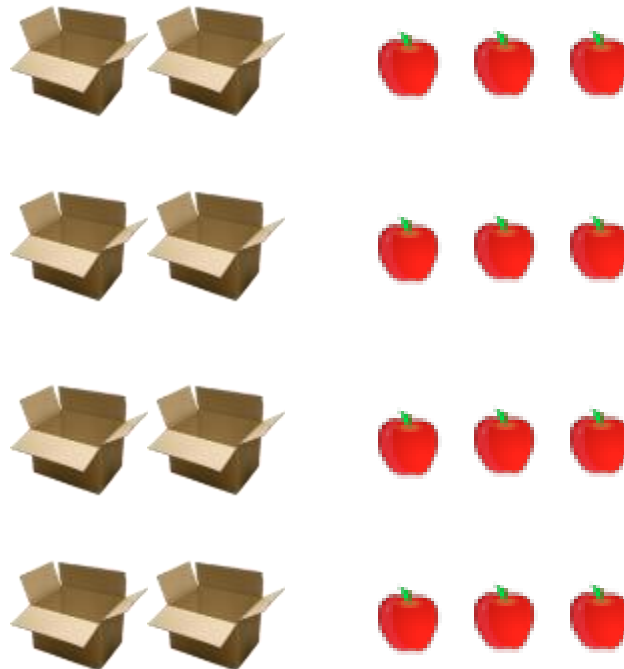
BOXES AND APPLES



A VISUAL WAY TO UNDERSTAND THE DISTRIBUTIVE PROPERTY:

$$4(2x + 3)$$

Q: How would I show it with boxes and apples?



**(4 groups.
Each group
has $2x + 3$.)**



SOLVE EACH EQUATION

$$\begin{aligned} 5x + 4 + 2x &= 25 \\ 7x + 4 &= 25 \\ -4 \quad -4 & \\ 7x &= 21 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} 5x + 4 &= 2x + 25 \\ -2x \quad -2x & \\ 3x + 4 &= 25 \\ 3x &= 21 \\ x &= 7 \end{aligned}$$



SOLVE EACH EQUATION

$$3x + 2x + 18 = 20 + 6x$$

$$5x + 18 = 20 + 6x$$

$-5x$ $-5x$

$$18 = 20 + x$$

-20 -20

$$-2 = x$$



HOMEWORK: WORKSHEET

