

Distributive Principle Lesson #1

- How can we solve this - in your groups 😊

$$2(5+4)? \text{ well obviously its } 2(9) = 18$$

- Is there another way??

$$\begin{aligned} & 2(5) + 2(4) \\ &= 10 + 8 \\ &= 18 \end{aligned}$$

Hmmm - does this really work?

$$-3(8+2)$$


$$\begin{aligned} -3(8+2) &= -3(10) \\ &= -30 \end{aligned}$$

$$\begin{aligned} &= -3(8) + -3(2) \\ &= -24 + -6 \\ &= -30 \end{aligned}$$




? WHY WOULD YOU NEED TO DO IT THIS WAY?

Never! unless.....

$$4(x+4)? \text{ What?!}$$

↑ can't add $x+4$ because they are unlike terms!!

$$4(x+4)$$


$$= 4x + 16$$

Practice - Simplify or evaluate if possible # 8+9

$$\textcircled{1} 7(x+2)$$

$$= 7x + 14$$

$$\textcircled{2} -2(c+5)$$

$$= -2c - 10$$

$$\textcircled{3} (a-6)2$$

$$= -12 + 2a$$

$$= 2a - 12$$

$$\textcircled{4} -(x+2)$$

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

$$= -x - 2$$

$$\textcircled{5} -2(x-5)$$

$$= -2x + 10$$


$$\textcircled{6} -3(-c-5)$$

$$= 3c + 15$$

$$\textcircled{7} 8(x+2x+3)$$

$$= 8x + 16x + 24$$

$$= 24x + 24$$

Just do it 

• always combine like terms if u can!

$$\textcircled{8} 5(-x+2x+3) = 5$$

$$-5x + 10x + 15 = 5$$

$$5x + 15 = 5$$

$$5x = -10$$

$$\frac{5x}{5} = \frac{-10}{5}$$

$$x = -2$$

$$\textcircled{9} -(x-4) = 2(x-4)$$

$$-1(x-4) = 2(x-4)$$

$$-x + 4 = 2x - 8$$

$$-x = 2x - 12$$

$$-3x = -12$$

$$\frac{-3x}{-3} = \frac{-12}{-3}$$

$$x = 4$$

Hmwk → Distributive Hmwk #1