

MS Algebra: 3.2.8

Warm-up: Find Someone Who

Any ?s on HW: Worksheet 3.2.7

Goal: I can solve multi-step equations in one variable.

HW: Worksheet 3.2.8



Thursday: Warm up

Find someone who... can simplify the following expressions:

$-3(x + 4)$
 $-3x - 12$

$5(-2x+4)$
 $-10x + 20$

$-4(4+7x)$
 $-16 - 28x$

Find someone who.....

Answers

$(-5 + 2x) \cdot 3$
 $-15 + 6x$

$4(-x - 5)$
 $-4x + 20$

$(1 + 9x) \cdot -10$
 $-10 - 90x$

$-2(9 - x)$
 $-18 + 2x$

$9(-4x - 3)$
 $-36x - 27$

$-(7 + 8x)$
 $-7 - 8x$

$-4(-8x - 8)$
 $32x + 32$

$-(-8x - 3)$
 $8x + 3$

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

The expression to represent the food in the cheeseburger extra value meal is: $2c + 1f + 1p$



Let c = # of cheeseburgers
 f = # of large french fries
 p = # of large pops
 n = # of chicken nuggets

The expression to represent the food in the chicken nuggets extra value meal: $6n + 1f + 1p$



Teddy orders 3 cheeseburger meals and 2 chicken nuggets meals for his family. Write an expression using the distributive property to represent the food in Teddy's order.

$$3(2c + 1f + 1p) + 2(6n + 1f + 1p)$$

$$6c + 3f + 3p + 12n + 2f + 2p = 6c + 12n + 5f + 5p$$

The Daily Deal at Pizza Hut includes:



Let p = # of pieces of pizza
 b = # of breadsticks

What could $3(8p + 5b)$ represent? **Ordering 3 Daily Deals**

What could $3(8p + 5b) - 5(3p + 2b)$ represent?

Ordering 3 Daily Deals and then 5 people each eat 3 pieces of pizza and 2 breadsticks.

Simplify the expression: $3(8p + 5b) - 5(3p + 2b)$

$$24p + 15b - 15p - 10b$$

$$9p + 5b$$

3.2.7: Simplify Using the Distributive Property & Combining Like Terms

$$4(3 + 2x) + 7x$$

$$12 + 8x + 7x \\ 15x + 12$$

$$2(3x - 5) + 7$$

$$6x - 10 + 7 \\ 6x - 3$$

$$3x + 4(2 + 7x)$$

$$3x + -8 + 28x \\ 31x - 8$$

$$2(10x + 8) + (x - 11)$$

$$20x + 16 + x + 11 \\ 19x + 27$$

Simplify each expression.

$$3(9x + 3) + 4(2 + 4x)$$

$$27x + -9 + -8 + 16x \\ 43x - 17$$

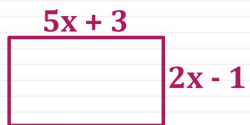
$$2x + 5(2x + 1) + 6x$$

$$2x + 10x + -5 + 6x \\ 18x - 5$$

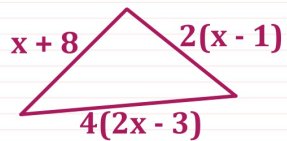
$$5 + 3(6x + 8) + 4x + 1$$

$$5 + -18x + 24 + 4x + -1 \\ -14x + 28$$

Find the perimeter of the object in simplified form.



$$2(5x + 3) + 2(2x + 1) \\ 10x + 6 + 4x + -2 \\ 14x + 4$$



$$x + 8 + 2(x + 1) + 4(2x + 3) \\ x + 8 + 2x + -2 + 8x + -12 \\ 11x - 6$$