

Warm Up:

Check your answers from your homework.

Discuss with your group any questions you had.

14. $13 + 2h$

15. $5n + 6.7$

16. $37t - 9.85$

17. 5 more than a number q

18. the quotient of y and 5

19. the product of 12 and x

24. twice the difference of 5 and a number n

30. 512

31. 496

32. 0

33. 3458

Expressions Vocabulary

$$3x + 4x + 7 - 2ab + 6ab - 5x^2$$

Terms: combo of #s and/or variables

$$3x, 4x, 7, -2ab, 6ab, -5x^2$$

Like Terms: terms w/ same variable ending or constants

$$3x + 4x, -2ab + 6ab$$

Constants: # w/o variable

$$7$$

Coefficients: # in front of the variable

$$3, 4, -2, 6, 5$$

$$\begin{array}{l} \vdots x + 5 \\ \vdots x + 2 \end{array}$$

$21a$ $-7a$ $6b$ $2ab$ $10a$ $4b^2$ $5b$

a^2 ab $6ab^2$ b^3 $6ba$ $-4b$ x

Your Turn! - Simplify

$$1) \boxed{4a+b+a} - \boxed{3b+34b^2}$$

$$5a - 2b + 34b^2$$

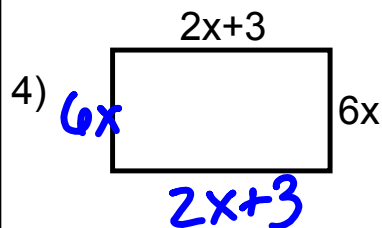
$$2) \boxed{5x-3x} + \boxed{2y^2+3y^2}$$

$$2x + 5y^2$$

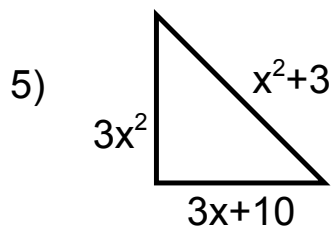
$$3) 7a + \underline{2ac} - 4ab + 3a + \underline{2ca}$$

$$10a + 4ac - 4ab$$

Write an expression to show the perimeters of the two objects.



$$16x + 6$$



$$4x^2 + 13 + 3x$$

Distributive Property

$$a(b+c) = \underline{ab+ac}$$

Together:

$$2(5x+3)$$

$$10x+6$$

$$-(m+5)$$

$$-m-5$$

$$-m+5$$

$$3x(x+6)$$

$$3x^2+18x$$

$$x \cdot x = x^2$$

$$3 \cdot 3 = 3^2$$

Your turn:

$$-(y-5)$$

$$-y+5$$

$$(1/3)(3b-6)$$

$$\frac{1}{3}(3b-6)$$

$$b-2$$

$$2a(4-3a)$$

$$8a-6a^2$$

$$\frac{3}{10} \left(\frac{5}{6} - \frac{15}{9} \right)$$

Combining AND Distributing

You MUST Distribute before you can CLT

Together:

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

$$5 - 2x + 8$$

$$-2x + 13$$

$$-(10 - x) + 5x - 5$$

$$-10 + x + 5x - 5$$

$$6x - 15$$

$$-4(8 - 3x) + \left(\frac{2}{3}\right)(9x - 18)$$

$$-32 + 12x + 6x - 12$$

$$18x - 44$$

Your turn:

$$4x^2 - 3(x + 4) - 12$$

$$9x + 3(2x - 1)$$

$$3x(4 - x) - 7x$$

$$4x^2 - 3x - 24$$

1.) $-9x^2 - 2x(x - 4)$

2.) $5x(1 + 9x) - 5x^2$

3.) $-9n^2 - 6n(1 + 10n)$

4.) $-6x(6x + 2) + 4x$

5.) $-10x(8x - 3) - 3x^2$

6.) $-9(4x - 8) + 2x$

7.) $n(-6n - 6) - 3n$

8.) $2x^2 - 5x(1 - 8x)$

