

## Warm Up

April 11, 2019

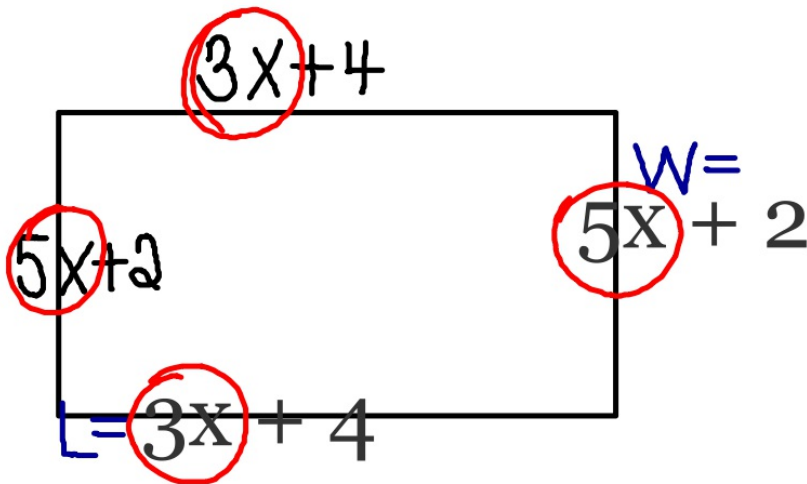
1.) Simplify:  $(2x + 3)(2x - 3) - (14x + 10)$

2.) Your starting salary at a new company is \$34,000 and it increase by 2.5% each year.

A. Write an exponential growth function to represent this situation.

B. What will you salary be in 5 years? Round your answer the nearest dollar.

3.) Simplify:  $(4x^2)(3x^3) - 6x^5$



Rectangle

$$A = LW$$

$$P = 2L + 2W$$

Area

$$(3x+4)(5x+2)$$

$$3x+4$$

5x	$15x^2$	$20x$
+2	$6x$	8

$$a = 15x^2 + 26x + 8$$

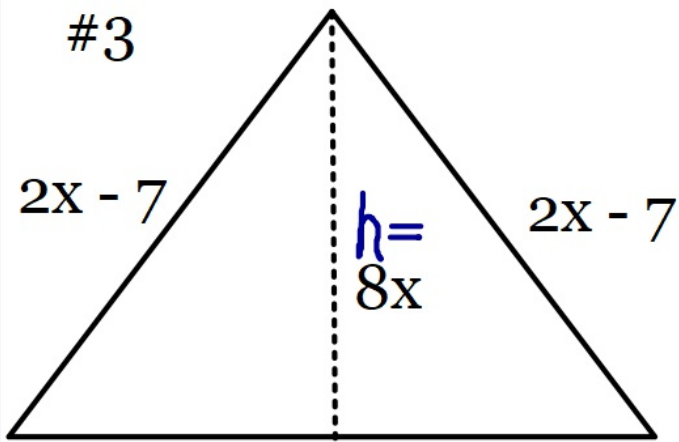
perimeter

$$p = 2(3x+4) + 2(5x+2)$$

$$p = 6x + 8 + 10x + 4$$

$$p = 16x + 12$$

#3



Triangle

$$A = (1/2) bh$$

P = Sum of all 3 sides

$$b = 5x + 2$$

area

$$a = \frac{1}{2} (5x + 2)(8x)$$

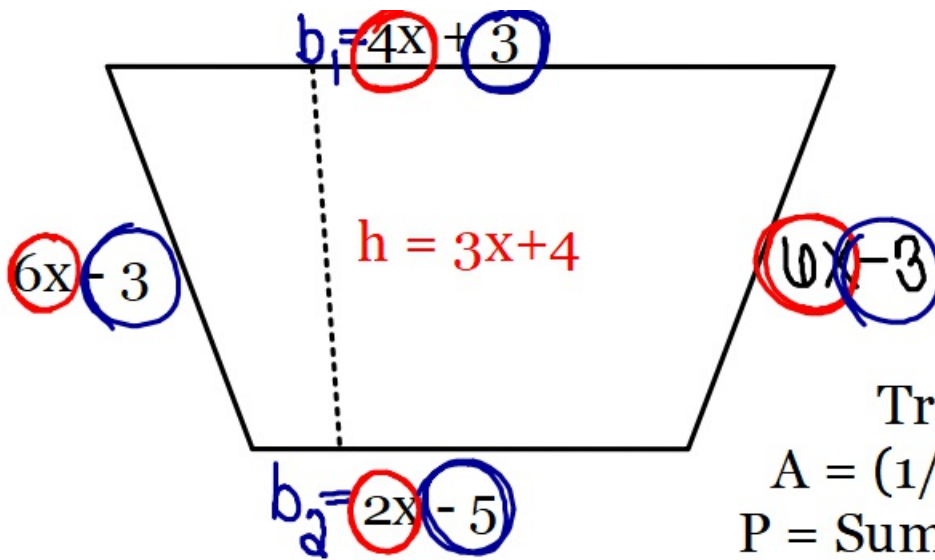
$$a = \frac{1}{2} (40x^2 + 16x)$$

$$a = 20x^2 + 8x$$

perimeter

$$p = (2x - 7) + (2x - 7) + (5x + 2)$$

$$p = 9x - 12$$



Trapezoid

$$A = (1/2)h(b_1 + b_2)$$

$$P = \text{Sum of all 4 sides}$$

$$A = \frac{1}{2}(3x+4)(4x+3+2x-5)$$

$$A = \frac{1}{2}(3x+4)(6x-2)$$

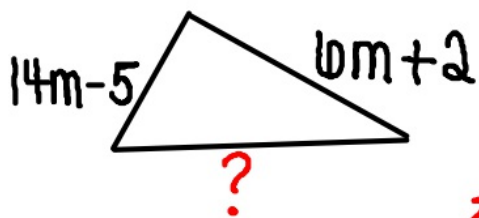
perimeter

$$P = 18x - 8$$

	$3x + 4$		
$6x$	$18x^2$	$24x$	
$-2$	$-6x$	$-8$	

$$A = \frac{1}{2}(18x^2 + 18x - 8)$$

$$A = 9x^2 + 9x - 4$$



$$14m-5+6m+2$$

$$20m-3$$

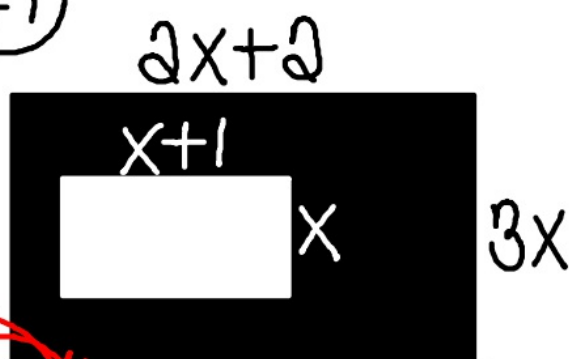
$$P=25m+3$$

$$25m+3 - (20m-3)$$

$$25m+3-20m+3$$

$$5m+6$$

#7



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

$$6x^2+6x - (x^2+x)$$

$$6x^2+6x - x^2 - x$$

$$5x^2+5x$$