Algebra Review #34 *SHOW HOW YOU SOLVED EACH PROBLEM*

1.
Solve:

$(6x^2 - 10xy - 9y) + (5x^2 - 5xy - y)$

2.
Solve:

$(30x^2 + 5xy - y) - (45x^2 + 18xy - 6y)$

3. Draw a model to represent $(4x - 1)(2x + 2)$.

Write the polynomial solution to
$(4x - 1)(2x + 2)$:

NAME _____

4. Find the mistake in the problem, circle it, and then fix the work:

Joe Schmoe	You

$8x - 27 - 10 - 6x = 15$
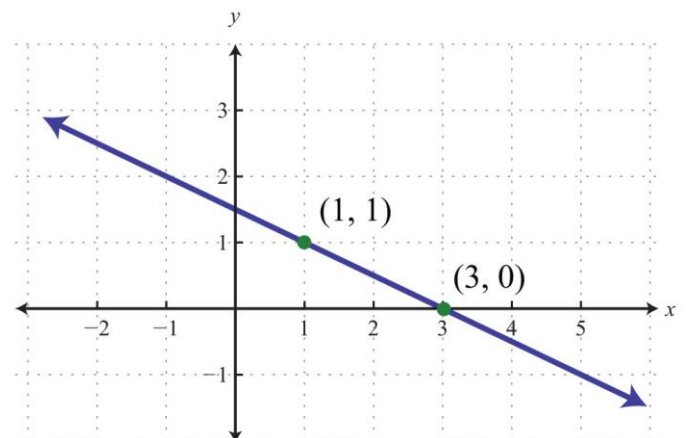
$2x - 27 - 10 = 15$

$2x - 17 = 15$
$\underline{+ 17 + 17}$

$\dfrac{2x}{2} = \dfrac{32}{2}$

$x = 16$

5. Find the equation of a line between the points (0,2) and (1, -2).

6. Write an equation for the graph shown below:

Y-intercept _____   Slope _____

7. Simplify $2\sqrt{150} - \sqrt{486}$

9. Simplify:
$$\frac{2(2xy^3)^2}{y^7}$$

8. Write a system of equations to describe the situation below, solve and fill in the blanks.

Miki had brochures printed for her new business venture. She originally ordered 5 boxes of black-and-white brochures and 3 boxes of color brochures, which cost a total of $140. After those ran out, she spent $114 on 3 boxes of black-and-white brochures and 3 boxes of color brochures. Given that the prices didn't change, what was the price of each type of brochure?

10. Solve for x:
$$\frac{1}{8} = \frac{(x+5)}{24}$$

The prices were $ _____ for a box of black-and-white brochures and $

_____ for a box of color brochures.