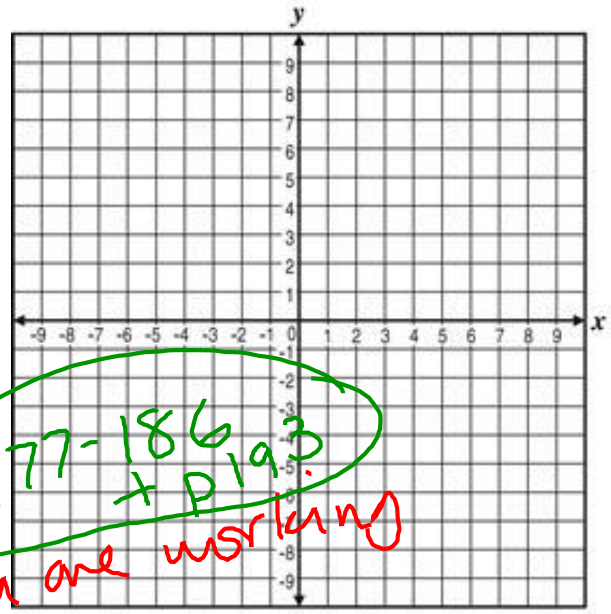
Friday, February 1, 2019

- Warm-up
  - Solve the given system using 3 methods

$$\begin{cases} 3x + 5y = 30 \\ 2x + 2y = 16 \end{cases}$$

  - graphing
  - substitution
  - elimination



p193 only 1-14

p177-186 + p193 while you are working

10-3
10-4

10-5 Practice w/sheet for work

- Activity 10 Practice
  pages 193-194 (only numbers 1-14)

Objectives

Content: I will solve quadratics using various methods.

Social: I will participate with my group and use my time wisely.

Language: I will ask clear questions if I do not understand.

$$\begin{cases} 3x + 5y = 30 \\ 2x + 2y = 16 \end{cases}$$

$3(5) + 5(3) = 30$

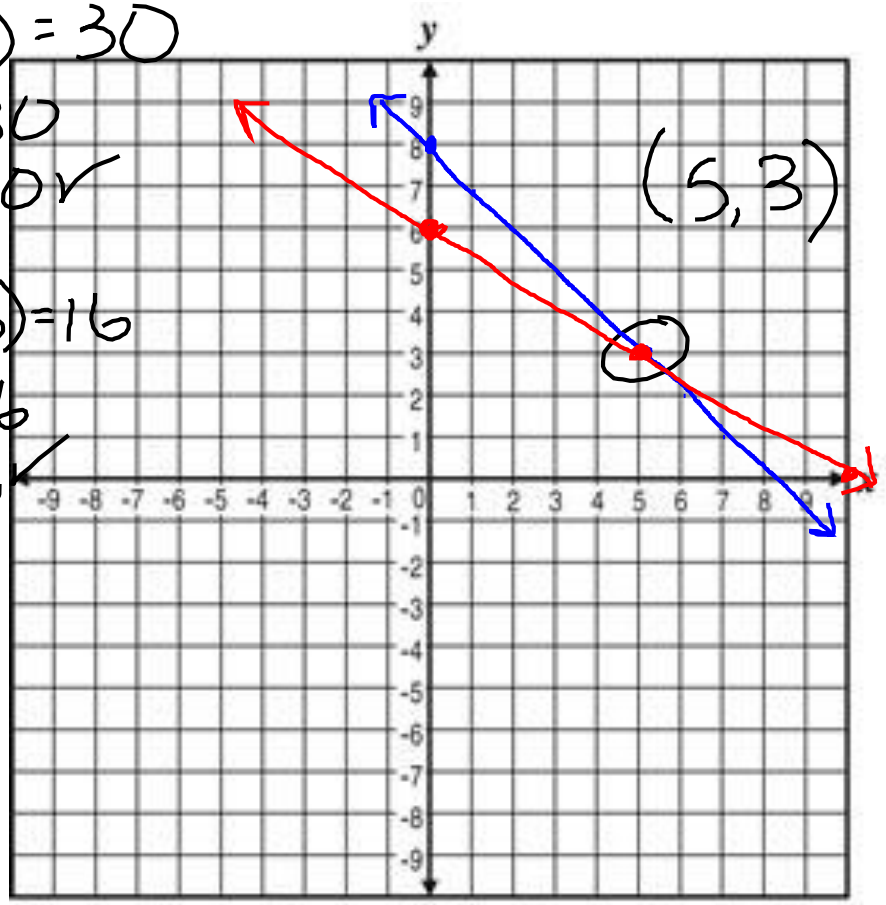
$15 + 15 = 30$

$30 = 30$ ✓

$2(5) + 2(3) = 16$

$10 + 6 = 16$

$16 = 16$ ✓



$3x + 5y = 30$

$-3x \quad -3x$

$\frac{5y}{5} = \frac{-3x}{5} + \frac{30}{5}$

$y = -\frac{3}{5}x + 6$

$2x + 2y = 16$

$-2x \quad -2x$

$\frac{2y}{2} = \frac{-2x}{2} + \frac{16}{2} \rightarrow y = -x + 8$

$$\begin{cases} 3x + 5y = 30 \\ 2x + 2y = 16 \end{cases}$$

$3x + 5y = 30 \rightarrow y = -\frac{3}{5}x + 6$

$2x + 2y = 16 \rightarrow y = -x + 8$

$y = y$

$-\frac{3}{5}x + 6 = -1x + 8$

$+1x \quad -6 \quad +1x \quad -6$

$-\frac{3}{5} + \frac{5}{5}$

$\frac{5}{2} \cdot \frac{2}{5}x = \frac{2}{1} \cdot \frac{5}{2}$

$x = 5$

$y = -(5) + 8$

$y = 3$

$$\begin{cases} 3x + 5y = 30 \\ 2x + 2y = 16 \end{cases}$$

2

·5

$6x + 10y = 60$

$+ \quad -10x - 10y = -80$

$-4x = -20$

$\frac{-4x}{-4} = \frac{-20}{-4}$

$x = 5$

$3(5) + 5y = 30$

$15 + 5y = 30$

$-15 \quad -15$

$5y = 15$

$\frac{5y}{5} = \frac{15}{5}$

$y = 3$

1. Which variable? y
2. How?
3. Multiply
4. Add to eliminated
   Solve
5. Substitute