Do Now

Solve and check the system using elimination

$$\begin{array}{r} 2x - y = 6 \\ +\ x + y = -3 \\ \hline \end{array}$$

$$\frac{3x}{3} = \frac{3}{3}$$

$$x = 1$$

$$2x - y = 6$$

$$2(1) - y = 6$$

$$2 - y = 6$$

$$-2 \qquad -2$$

$$-y = 4$$

$$\frac{-y}{-1} = \frac{4}{-1}$$

$$y = -4$$

Solution

$$(1, -4)$$

$$2x - y = 6$$

$$2(1) - (-4) = 6$$

$$2 + 4 = 6$$

$$6 = 6 \checkmark$$

$$x + y = -3$$

$$1 + (-4) = -3$$

$$-3 = -3 \checkmark$$

Jan 18-2:20 PM

Homework Answers

1) (-4, -1)

2) Infinite # of Solutions

3) (2, -3)

4) (4, -6)

Dec 8-10:14 AM

Find the LCM (Least common multiple) for each set of numbers

1. 4 & 3

LCM = 12

4, 8, 12, 16.
3, 6, 9, 12, 15

2. 5 & 6

LCM = 30

3. 3 & 5

LCM = 15

4. 2 & 5

LCM = 10

5. 3 & 6

LCM = 6

6. 8 & 3

LCM = 24

Dec 13-6:33 AM

Example 1:

$4[5x + 9y = -3]$

$-5[4x + 7y = -3]$

$\cancel{20x} + 36y = -12$

$+ \cancel{20x} - 35y = 15$

$y = 3$

Solution $(-6, 3)$

LCM 5 & 4

20

$5x + 9y = -3$

$5x + 9(3) = -3$

$5x + \cancel{27} = -3$

$-\cancel{27} \quad -27$

$\frac{5x}{5} = \frac{-30}{5}$

$x = -6$

Nov 19-8:56 AM

Example 2:

$5[6x + 3y = -24]$

$3[7x - 5y = 6]$

LCM 3 & 5
= 15

$30x + \cancel{15y} = -120$

$21x - \cancel{15y} = 18$

$\frac{51x}{51} = \frac{-102}{51}$

$x = -2$

$6x + 3y = -24$

$6(-2) + 3y = -24$

$-12 + 3y = -24$

$+12 \quad +12$

$\frac{3y}{3} = \frac{-12}{3}$

$y = -4$

Solution
$(-2, -4)$

Nov 17-9:05 AM