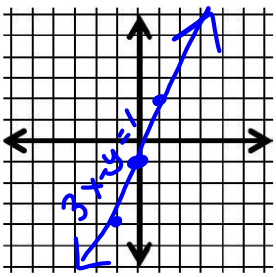
DO NOW

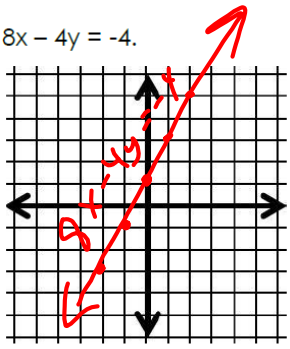
a) Graph the equation 3x – y = 1.



$\frac{-y}{-1} = \frac{-3x}{-1} + \frac{1}{-1}$ $m = \frac{3}{1}$

$y = 3x - 1$ $b = -1$

b) Graph the equation 8x – 4y = -4.



$8x - 4y = -4$
$-8x \qquad -8x$

$\frac{-4y}{-4} = \frac{-8x}{-4} - \frac{4}{-4}$ $m = \frac{2}{1}$

$y = 2x + 1$ $b = 1$

Jan 9-11:25 AM

HW Answers

1) C
2) D
3) B
4) C
5) A
6) B
7) C
8) C
9) A
10) B

11) $y = \frac{-1}{3}x - 5$

12) $y = \frac{-1}{2}x - 8$

13) $y = \frac{-2}{3}x + 2$

14) $y = -5x + 2$

15) $y = 2x - 3$

16a) Let x = # of rides
y = total $ spent
y =.50x +5

16b) 20= .50x + 5
x = 30 rides

May 20-7:19 AM

Systems of Equations Topics

- Solving a system of equations graphically
- Solving a system of equations algebraically:
  - using elimination or substitution
- Solving word problems using a system of equations
  - algebraically
- Determining if a given point is a solution for a system of equations

Dec 15-1:41 PM

Determine if the point (-10, 1) is a solution to the following system

$$\begin{cases} x - y = -9 \\ 3x + 4y = 8 \end{cases}$$

$-10-(1)=-9$

$-11 \neq -9$

Not a Solution

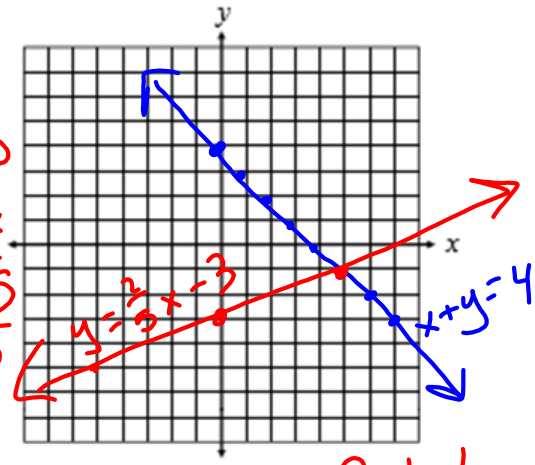
May 31-7:04 AM

Solve the system graphically

$$\begin{cases} x+y=4 \\ 2x-5y=15 \end{cases}$$

$x+y=4$
$-x \quad -x$
$y=-x+4$
$m=\frac{-1}{1}$
$b=4$

$2x-5y=15$
$-2x \quad -2x$
$\frac{-5y}{-5}=\frac{-2x}{-5}+\frac{15}{-5}$
$y=\frac{2}{5}x-3$



Solution
$(5,-1)$

May 31-7:00 AM

Solve the system using the substitution method

$$\begin{cases} 6x+2y=-26 \\ x-6y=21 \end{cases}$$

$+6y \quad +6y$
$x=\boxed{6y+21}$

$x=$
$y=$

$y=-4$

$6x+2y=-26$
$6(6y+21)+2y=-26$
$36y+126+2y=-26$
$38y+126=-26$
$-126 \quad -126$
$\frac{38y}{38}=\frac{-152}{38}$

Solve for x
$x-6y=21$
$x-6(-4)=21$
$x+24=21$
$-24 \quad -24$
$x=-3$

Solution $(-3,-4)$

May 31-7:01 AM

Solve the system using the elimination method

$$\begin{cases} 2x - y = 11 \\ 6x - 3y = 15 \end{cases}$$

-3

$$\begin{array}{r} -\cancel{6x} + \cancel{3y} = -33 \\ +\ \cancel{6x} - \cancel{3y} = 15 \\ \hline 0 \neq -18 \end{array}$$

No Solution

May 31-7:03 AM

Karen makes $5 per hour babysitting and $12 per hour giving music lessons. One weekend, she worked a total of 18 hours and made $139. **How many hours did she spend babysitting?**

Let x = # of hrs babysitting
y = # of hrs music lessons

$$5x + 12y = 139$$
$$x + y = 18$$

May 31-6:54 AM

Attachments

blankgraph.jpg