DO NOW

Is (2, 2) a solution to the system of equations?

$$2x = y + 2$$

$$x + y = 7$$

$$2(2)=2+2$$

 $4=4$

$$2+2=7$$
 $4/+7$

Mar 8-11:26 AM

Honework Answers

- 1) (2, 4)
- 2) Infinite # of Solutions
- 3) (3, 10)
- 4) No Solution
- 5) (3, 6)
- 6) (5, 2)
- 7) (-2, 2)
- 8) (6, 2)

Systems of Equations - Elimination Method

Solving systems of linear equations by addition.

Steps:

- 1. Variables must be "lined up"
- 2. Make sure the variable being eliminated has the same coefficient with opposite signs. (One has to be negative one has to be positive!)
- 3. Add your two equations together, and one of the variables should eliminate!
- 4. Solve
- 5. Substitute back into one of the original equations to find the other variable.
- 6. Check your solution

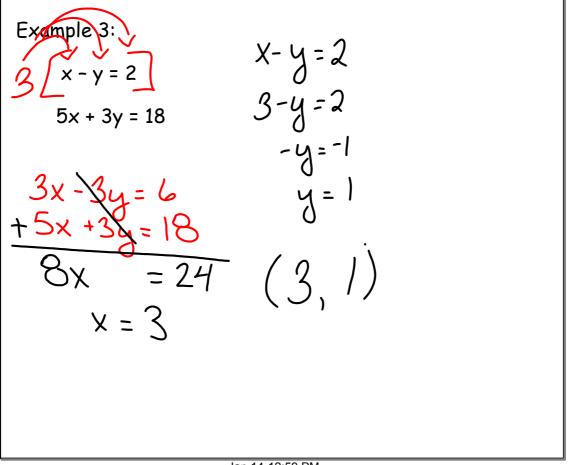
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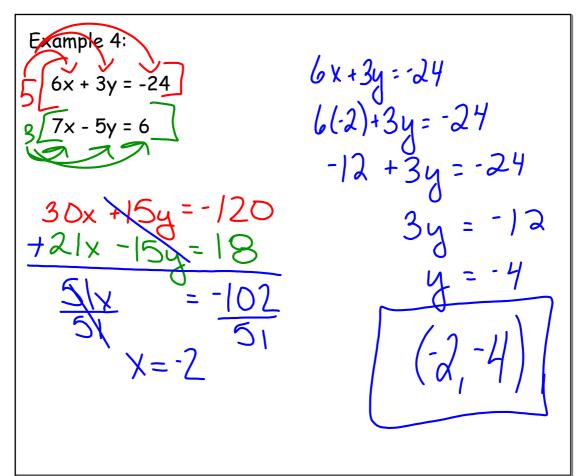
Example 1: x + 3y = -13 + -x - y = 5 -x - (-4) = 5 -x + 4 = 5-x + 4 =

Example 2:

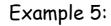
$$-1/3x + 2y = 6$$
 $3x + 2y = 6$
 $x + 2y = -2$
 $3(4) + 2y = 6$
 $3x + 2y = 6$

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Nov 17-9:05 AM



$$3x + 3y = 4$$
 $-3[x + y = 2]$
 $-8x - 3y = -6$
 $3x + 3y = 4$
 $0 + 2$

No Solution