

When asked "Is (x, y) a solution of the systems of equations"

- 1) Substitute in the point for x and y in BOTH equations.
- 2) Check BOTH equations that it works
- 3) If it works the answer is YES if it DOESN'T work in BOTH the answer is NO

Substitution Method for Solving a System of Equations

- 1) Solve one of the equations of the system in terms of x or in terms of v.
- 2) Substitute that into the other equation for the variable.
- 3) Solve the equation.
- 4) Substitute that value into one of the equations to find the other variable
- 5) Check the solution (point) in BOTH equations.

1) Is
$$(0, -3)$$
 a solution of the system of equations: $-5x + y = -3$
 $3x - 8y = 24$

2) Solve the system of equations by substitution:
$$4x - 2y = -14$$

$$x = -2y - 21$$

$$-8y - 84 - 2y = 14$$

$$-10y = 84 = -14$$

$$-10y = 70$$

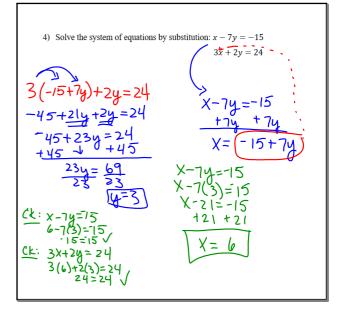
$$-10y = 70$$

$$-14y = -14$$

$$-1$$

3) Is (5, 4) a solution of the system of equations:
$$8x - y = -6$$

$$-16x + 2y = -5$$



5) Solve the system of equations by substitution: $-8x + 2y = 0$			
		x = 3y	

-5x - 7y =	
	-13