

Quiz 5.2

- 1) The system of equations is solved below. Explain what happens for each step of the substitution process.

$$\begin{cases} y = 3x - 15 \\ 2x + 3y = 21 \end{cases}$$

$2x + 3(3x - 15) = 21$ a) _____

$2x + 9x - 45 = 21$ b) _____

$11x - 45 = 21$ c) _____

$11x = 66$ d) _____

$x = 6$ e) _____

- 2) The answer for question #1 above is not complete. Explain what else needs to be done to finish solving the system.
- 3) Is $(3, -2)$ a solution to the system $\begin{cases} 2x - 4y = 14 \\ x = y + 5 \end{cases}$?
Show your work properly.

- 4) Solve the systems of equations below. Show all your work.

a. $\begin{cases} y = 8x - 10 \\ y = -x - 1 \end{cases}$

b. $\begin{cases} y = 2x + 7 \\ 4x + 2y = 18 \end{cases}$

Quiz 5.2

- 1) The system of equations is solved below. Explain what happens for each step of the substitution process.

$$\begin{cases} x = 3y - 10 \\ 2x + 3y = 7 \end{cases}$$

$2(3y - 10) + 3y = 7$ a) _____

$6y - 20 + 3y = 7$ b) _____

$9y - 20 = 7$ c) _____

$9y = 27$ d) _____

$y = 3$ e) _____

- 2) The answer for question #1 above is not complete. Explain what else needs to be done to finish solving the system.
- 3) Is $(3, -2)$ a solution to the system $\begin{cases} 2x - 4y = 14 \\ y = x + 5 \end{cases}$?
Show your work properly.

- 4) Solve the systems of equations below. Show all your work.

a. $\begin{cases} y = 8x - 10 \\ y = -x + 8 \end{cases}$

b. $\begin{cases} y = 2x + 7 \\ 2x + y = 9 \end{cases}$