

Questions:

Notes:

4) Solve the second variable

$$y = 50 - 20$$

$$y = 30$$

$$\begin{matrix} x, y \\ (20, 30) \end{matrix}$$

System of Equations by Elimination

- 1) You must cancel out one of the variables by making it an opposite operator.
- 2) Add the equations together to solve for one variable.
- 3) Use your solution to solve for the second variable.

$$\begin{array}{r} x + 3y = 1 \\ -3x - 3y = -15 \\ \hline -2x = -14 \\ -2 \quad \cdot 2 \\ \hline \boxed{7 = x} \end{array}$$

$$\begin{array}{r} 7 + 3y = 1 \\ -7 \quad \cdot -7 \\ \hline 3y = 6 \\ \frac{3}{3} \quad \cdot \frac{3}{3} \\ \hline \boxed{y = 2} \end{array}$$

Ex] System of Equations : World problems

A class used cars and vans to go on a field trip because all of the buses were already in use. They used 8 vehicles to go on the trip. Each car holds 5 students and each van holds 6 students. If 43 students went on the trip, then how many of each type of vehicle did the class use?