

1. **Reasoning** Which of the following systems would be most efficiently solved using the elimination method?

$$\begin{array}{|l} \hline \text{System A} \\ \hline \end{array} \left| \begin{array}{l} 2x + 2y = 6 \\ -6x - 2y = 6 \end{array} \right.$$

$$\begin{array}{l} \text{System B} \\ y = 2 - 3x \\ 4x - 2y = -2 \end{array}$$

first 2 steps

2. Explain how you would solve the following system using the elimination method.

$$\begin{array}{r} 2x + 5y = -6 \\ -1 \left( \begin{array}{r} 2x + 7y = 14 \\ \uparrow \\ -2 \quad 0 \end{array} \right) = -2x \end{array}$$

when the hw  
is so hard you  
draw yourself  
stressed bc  
what is going  
on ♥ (im cooked)



**Solve each system of equations by elimination. Check your solution.**

$$\begin{array}{r} x + y = 12 \\ x + y = 2 \\ \hline 2x = 14 \end{array}$$

$$\begin{array}{r} 3x + 4y = 9 \\ -3x + 2y = -3 \\ \hline \end{array}$$

$$\begin{array}{r} -x + y = 4 \\ -2x + y = 2 \\ \hline \end{array}$$

$$\begin{array}{l} 6x + 2y = 10 \\ 3(-2x + 2y = 2) \end{array}$$

$$\begin{array}{r} 4x + 2y = 7 \\ 3x + 6y = 9 \\ \hline \end{array}$$

$$\begin{array}{l} 5x + 6y = 1 \rightarrow 5x - 6y = 1 \\ 3(2x + 2y = 18) \rightarrow 6x + 3(2y) = 54 \\ \hline \end{array}$$

$$\begin{array}{r} 2(5) + 2y = 18 \\ \hline 10 + 2y = 18 \end{array}$$

$$\begin{array}{r} -10 \quad -10 \\ \hline \end{array}$$

$$\begin{array}{r} 2y = 8 \\ \hline 2 \quad 2 \end{array}$$

$$(5, 4)$$

$$y = 4$$