

Question	Solve the simultaneous equations $4x - 3y = 22$ $2x + 3y = 20$	Solve the simultaneous equations $4x + 3y = 44$ $2x + 3y = 28$	Solve the simultaneous equations $-3x + 4y = 14$ $3x + 2y = 16$
Are we eliminating x or y?	y	y	x
Do we need to add or subtract our equations?	$  \begin{array}{r}  + \quad 4x - 3y = 22 \\  \quad 2x + 3y = 20 \\  \hline  6x + 0y = 42 \\  \\  6x = 42  \end{array}  $	$  \begin{array}{r}  - \quad 4x + 3y = 44 \\  \quad 2x + 3y = 28 \\  \hline  2x + 0y = 16 \\  \\  2x = 16  \end{array}  $	$  \begin{array}{r}  + \quad -3x + 4y = 14 \\  \quad 3x + 2y = 16 \\  \hline  0x + 6y = 30 \\  6y = 30  \end{array}  $
Solve for the first variable	$  \begin{array}{r}  6x = 42 \\  \div 6 \qquad \div 6 \\  x = 7  \end{array}  $	$  \begin{array}{r}  2x = 16 \\  \div 2 \qquad \div 2 \\  x = 8  \end{array}  $	$  \begin{array}{r}  6y = 30 \\  \div 6 \qquad \div 6 \\  y = 5  \end{array}  $
Substitute into either equation	$  \begin{array}{l}  4x - 3y = 22 \\  4(7) - 3y = 22 \\  28 - 3y = 22  \end{array}  $	$  \begin{array}{l}  4x + 3y = 44 \\  4(8) + 3y = 44 \\  32 + 3y = 44  \end{array}  $	$  \begin{array}{l}  3x + 2y = 16 \\  3x + 2(\quad) = 16  \end{array}  $
Solve for second variable	$  \begin{array}{r}  28 - 3y = 22 \\  -28 \qquad \qquad -28 \\  -3y = -6 \\  \div -3 \qquad \div -3 \\  y = 2  \end{array}  $	$  \begin{array}{l}  32 + 3y = 44 \\  \\  y =  \end{array}  $	$  \begin{array}{l}  x =  \end{array}  $

Question	Solve the simultaneous equations $3x + 4y = 33$ $3x + 2y = 21$	Solve the simultaneous equation $4x + 3y = 40$ $2x + 3y = 26$	Solve the simultaneous equations $4x - 3y = 16$ $2x + 3y = 44$
Are we eliminating x or y?			
Do we need to add or subtract our equations?	$\begin{array}{r} 3x + 4y = 33 \\ - \quad 3x + 2y = 21 \\ \hline 0x + 6y = 12 \\ \\ 6y = 12 \end{array}$	$\begin{array}{r} 4x + 3y = 40 \\ - \quad 2x + 3y = 26 \\ \hline \end{array}$	
Solve for the first variable	$6y = 12$		
Substitute into either equation			
Solve for second variable			