

# Fill in the Blanks

## Simultaneous Equations (different x coefficients)

Question	Multiply one or both equations	Add or subtract?	Carry out addition or subtraction	Work out y	Substitute y into one equation	Work out x	State both answers
$x + 2y = 5$ $3x + y = 10$	$3x + 6y = 15$ $3x + y = 10$	Subtract	$\begin{array}{r} 3x + 6y = 15 \\ - 3x + y = 10 \\ \hline 5y = 5 \end{array}$	$y = 1$	$x + 2y = 5$ $x + 2 = 5$	$x = 3$	$x = 3$ $y = 1$
$4x - y = 3$ $x + 3y = 17$	$4x - y = 3$ $4x + 12y = 68$	Subtract	$\begin{array}{r} 4x - y = 3 \\ - 4x + 12y = 68 \\ \hline \end{array}$				
$x - 5y = 14$ $-2x - y = -6$	$2x - 10y = 28$ $-2x - y = -6$	Add					
$2x + 2y = 11$ $3x - 4y = 13$							
$5x + 7y = 6$ $-3x - 2y = 3$							
$4x + 3y = -3$ $6x + 5y = -6$							