Investigating Simultaneous Equations

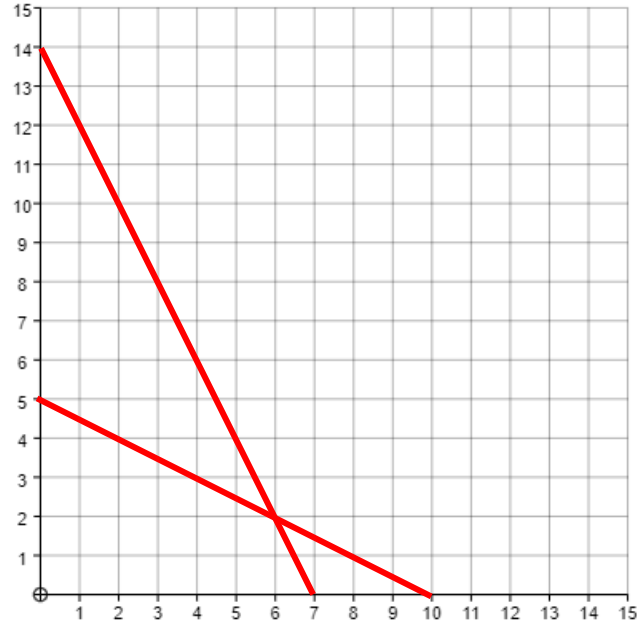| (a)	(b)
Solve the simultaneous equations $\quad x + 2y = 10$ $2x + y = 14$	Solve the simultaneous equations $\quad 4x + 3y = 24$ $x + 2y = 11$

$x = 6, y = 2$

$x = 3, y = 4$

Plot the equations of the lines $x + 2y = 10$ and $2x + y = 14$ on the same axes below. What do you notice?

Plot the equations of the lines $4x + 3y = 24$ and $x + 2y = 11$ on the same axes below. What do you notice?

Solving the simultaneous equations gives the coordinates of where the two lines cross.