Mathematics

Points of intersection

Independent Task

Ms Jones

Try this

Draw the graphs of the two equations on the same axis:

$$y = 2x + 1$$

$$x + y = 5$$

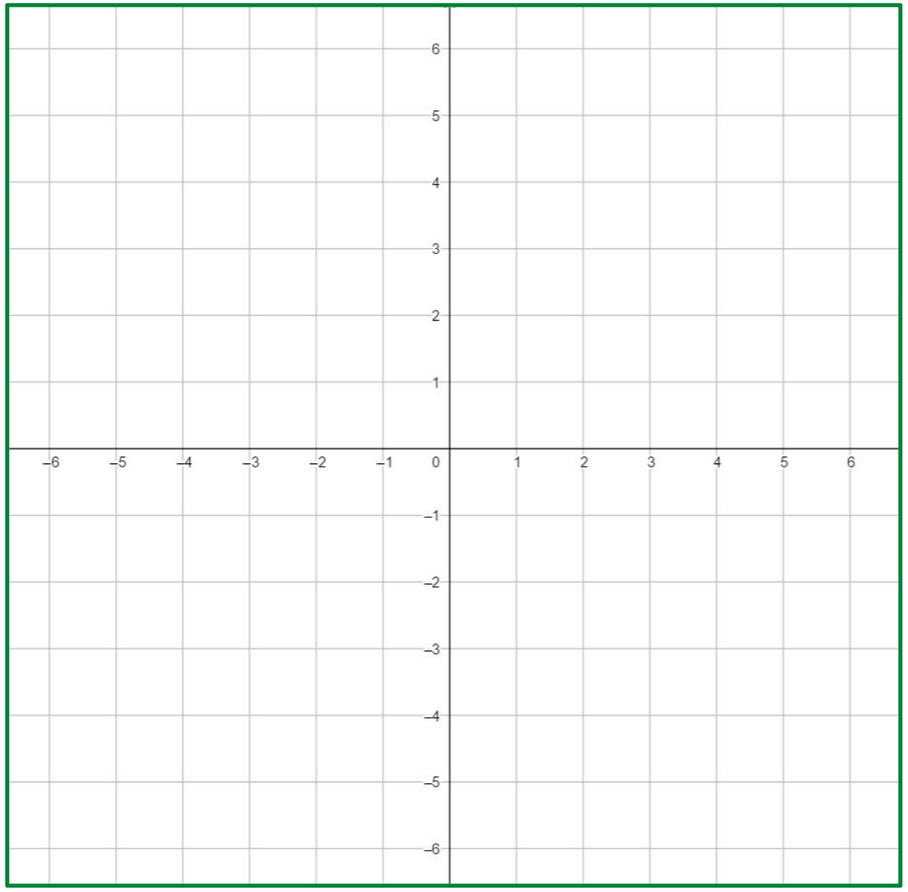
Independent task

1. Draw the graph of y = 3x + 4 and y = -x + 6.

2. Use the graph to estimate the point of intersection of y = 3x + 4 and y = -x + 6.

3. How could we change the line y = 3x + 4 to increase the x-ordinate in the point of intersection?

4. How could we change the line y = 3x + 4 to decrease the y-ordinate in the point of intersection?



Explore

Decide if the following are always, sometimes or never true.

Justify each of your answers

Two lines intersect at least once

A set of three lines intersect at two points

A set of three lines has one point of intersection