Mathematics

Representing simultaneous equations graphically 2

Independent Task

Ms Jones

Try this

What's the same and what's different about the following linear equations?

$$y = 2x + 2$$

$$y = 9 - 2x$$

$$y = 2$$

$$y = 2x - 7$$

Sketch the graphs of each equation on the same axis.

Independent task

$y = 2x + 1$

$y = x + 3$

$y = 9 - 2x$

$y = 2$

$x + 2y = 4$

$y = 2x - 7$

By selecting equations to be solved simultaneously, satisfy the conditions in each statement:

1) These two equations have a solution where the x coordinate is negative.

2) These two equations have no solution.

3) These two equations have a solution where x and y are opposite signs.

4) These three equations have a single solution.

Explore

Create your own equations to satisfy the four conditions:

1) These two equations have a solution where the x and y coordinates are both negative.

2) These two equations have no solution.

3) These two equations have a solution where x and y are opposite signs.

4) These three equations have a single solution.