

Mathematics

Naming straight line graphs

Downloadable Resource

Mr Maseko

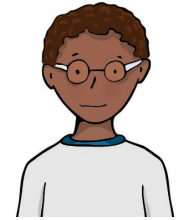


Try this

Xavier, Yasmin, and Zaki are thinking of a coordinate.

- 1 Write 3 different coordinates each student might be thinking of...
- 2 Is it possible that 2 students are thinking of the same coordinate?

In my coordinate, the y -ordinate is 3 greater than the x -ordinate



In my coordinate, the y -ordinate is double x -ordinate

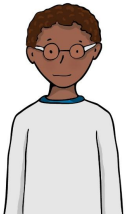


In my coordinate, the y -ordinate is 10



Connect

... plot the 3 coordinates you came up with for each student on a coordinate grid



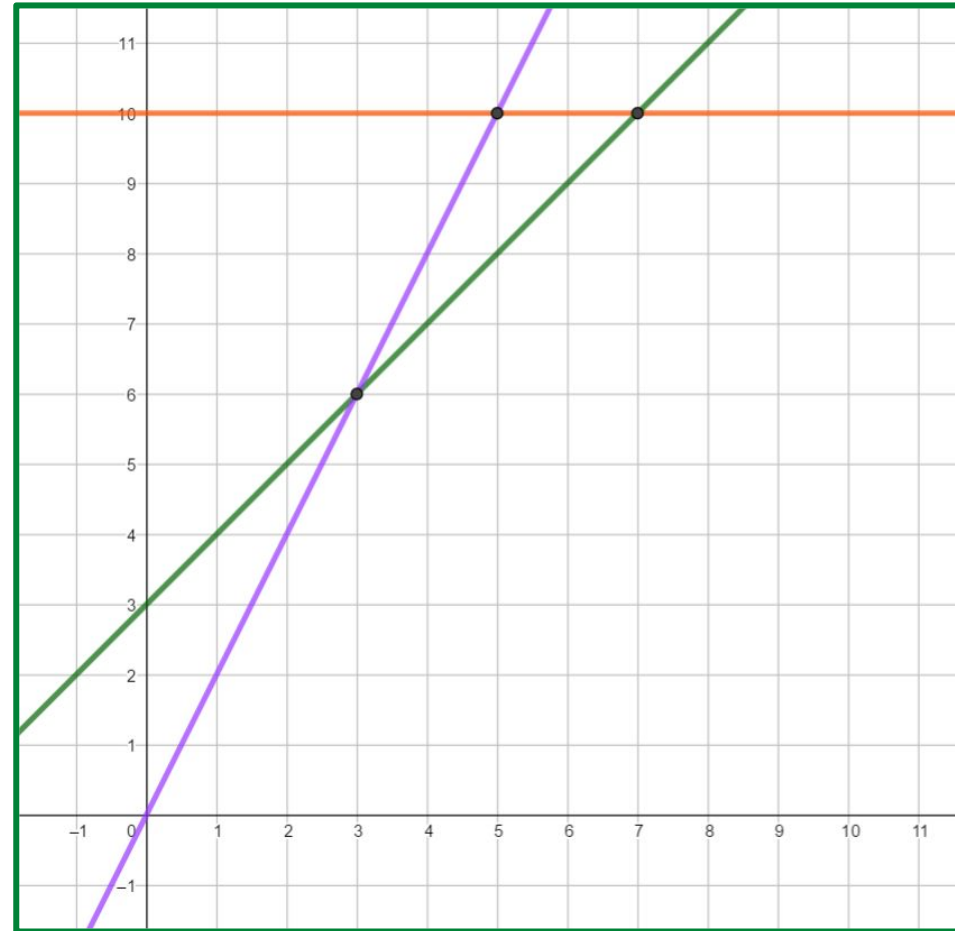
$(1,4)$, $(0,3)$, $(8,11)$



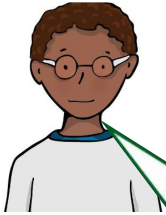
$(2,4)$, $(4,8)$, $(6,12)$



$(2,10)$, $(5,10)$, $(12,10)$



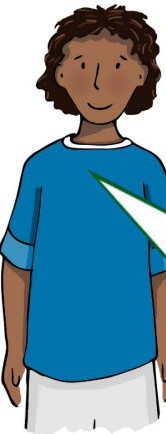
Connect



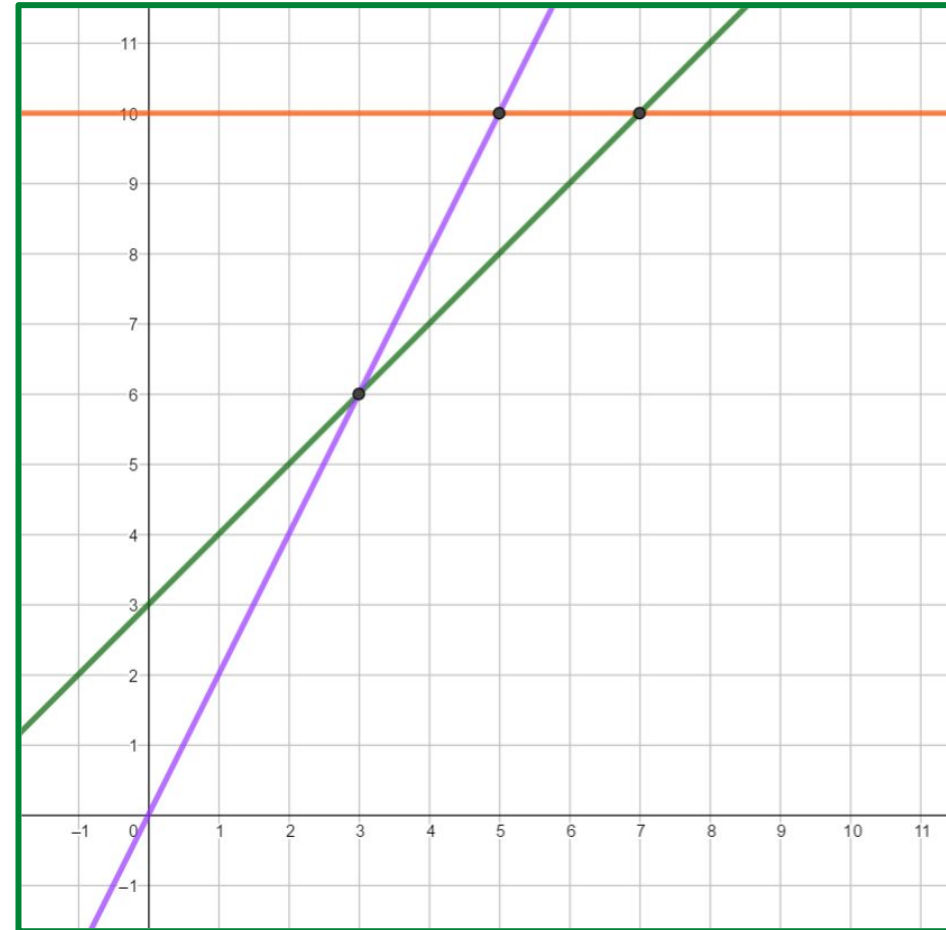
In my coordinate, the y -ordinate is 3 greater than the x -ordinate



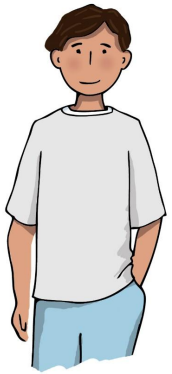
In my coordinate, the y -ordinate is double x -ordinate



In my coordinate, the y -ordinate is 10

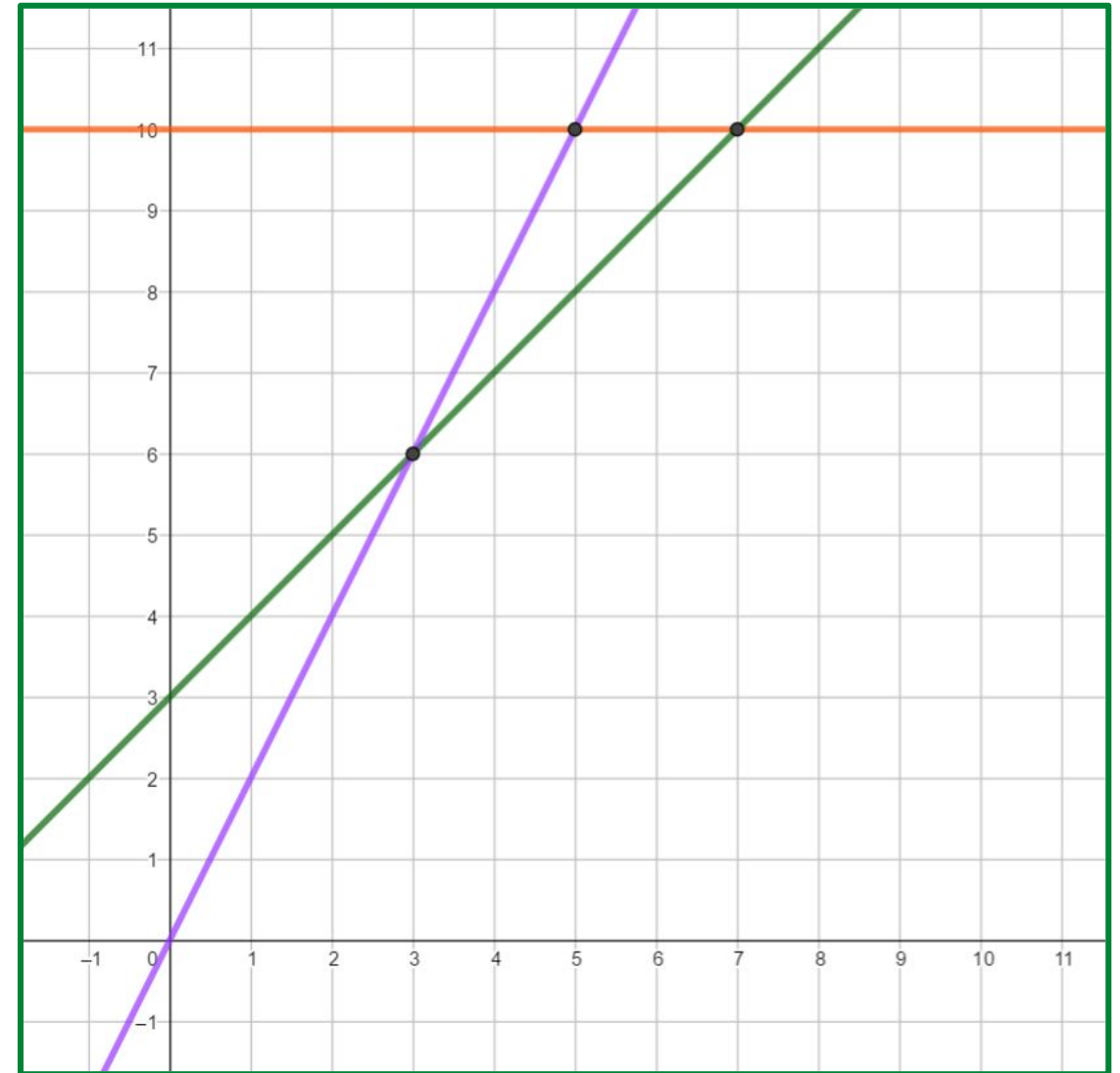


Connect



In my line, all of the y -ordinates are 1 less than the x -ordinate

Plot and correctly label Antoni's line



Independent task

1) List 3 coordinates on the following lines

a) $y = 3x$

b) $y = 10 - x$

c) $y = x + 4$

2) Complete the coordinates that lie on the line
 $y = 12 - x$

a) $(1, \quad)$

b) $(8, \quad)$

c) $(\quad, 12)$

d) $(-1, \quad)$

3) Find 3 lines which $(2, 6)$ lies on



Explore

$(5, 10)$



This point would be on
the line $y = 2x$

This point would be on the
line $y = 15 - x$



- 1 Find some other lines that $(5, 10)$ would lie on.
- 2 Come up with your own for the following coordinates

$(0, 0)$ $(3, 9)$ $(4, -4)$

