

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?

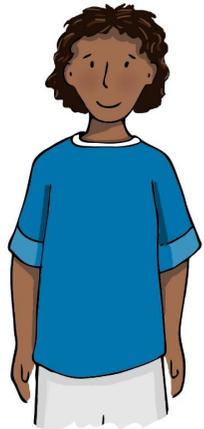
In my coordinate, the  $y$ -ordinate is 3 greater than the  $x$ -ordinate



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



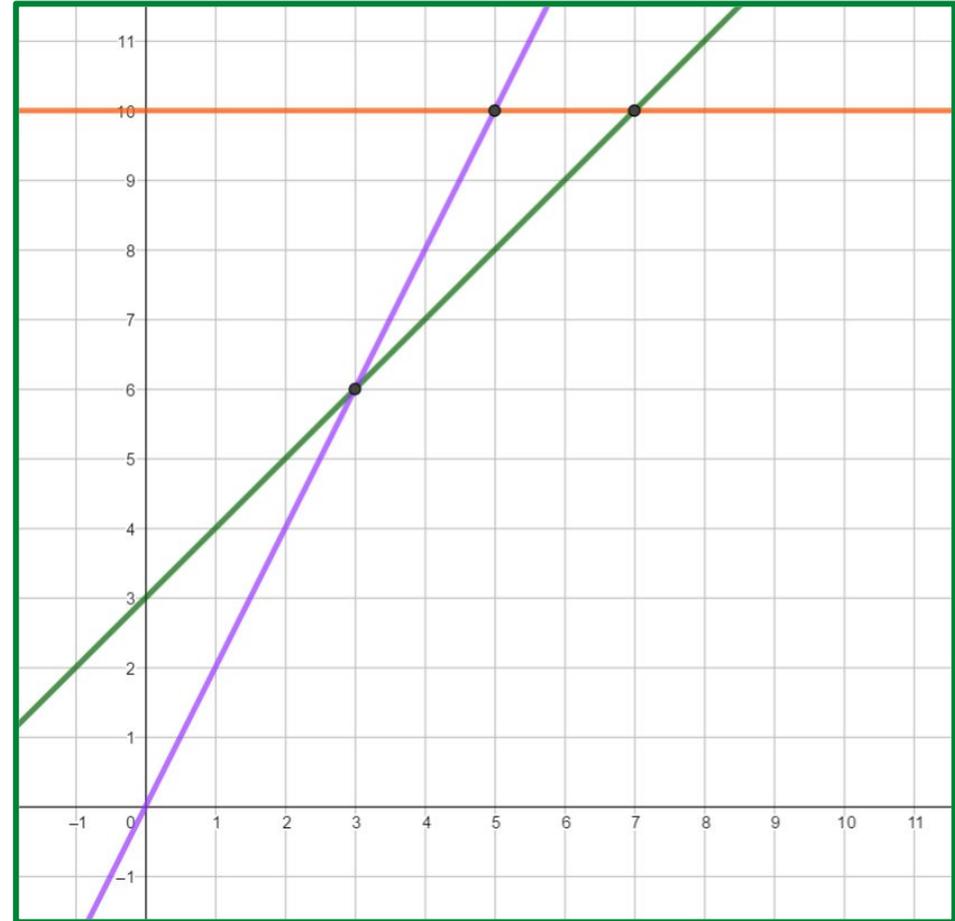
$(1,4)$ ,  $(0,3)$ ,  $(8,11)$



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



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



# Connect



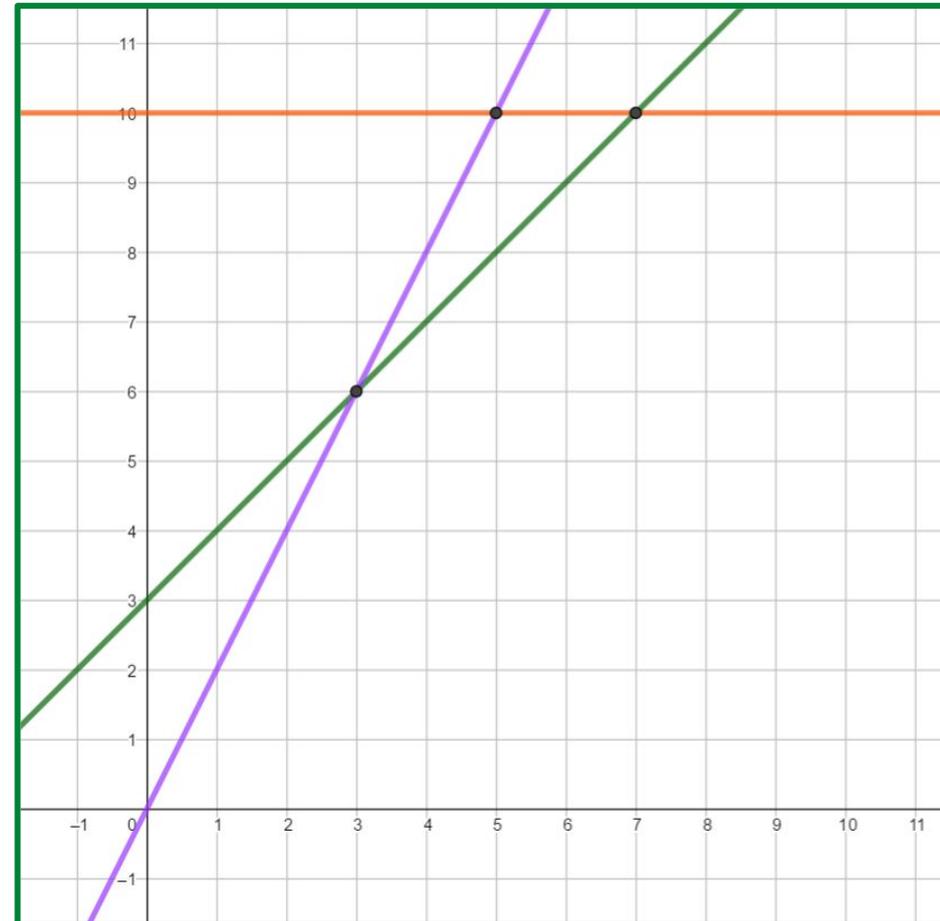
In my coordinate, the  $y$ -ordinate is 3 greater than the  $x$ -ordinate



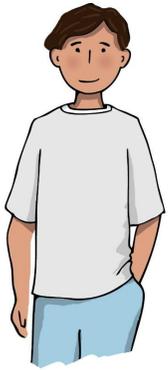
In my coordinate, the  $y$ -ordinate is double  $x$ -ordinate



In my coordinate, the  $y$ -ordinate is 10

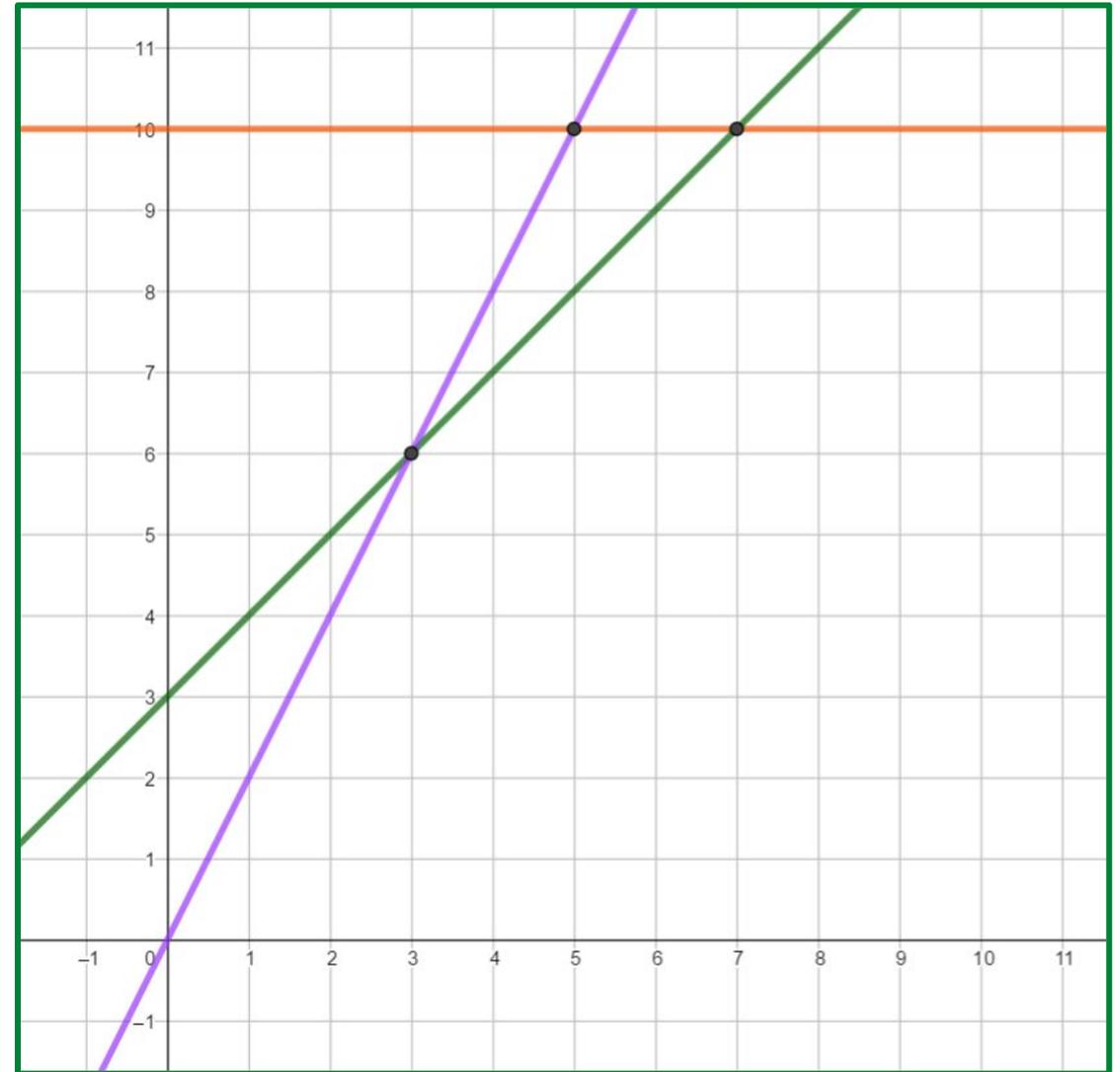


# Connect



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, )

b) (8, )

c) ( ,12)

d) (-1, )

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

$(0, 0)$      $(3, 9)$      $(4, -4)$

