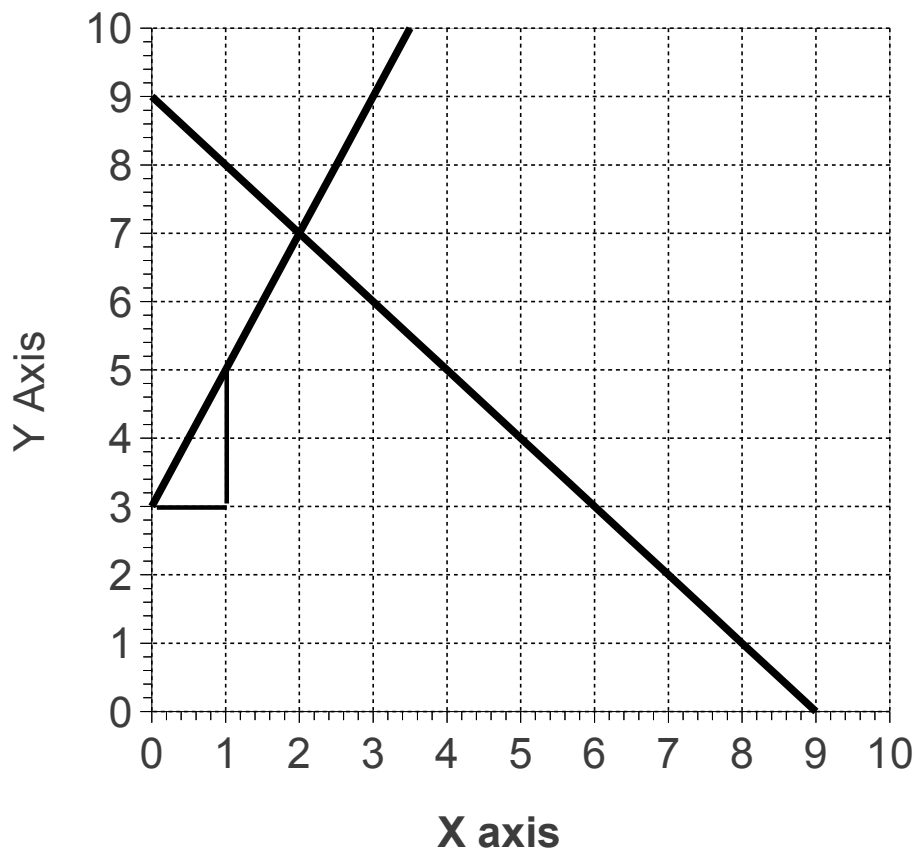


Graphs 3: Straight line graphs



Look at the straight lines above.

One line is 'going up' and the other is 'coming down'

The 'going up' line has a **gradient** of 2, because when you increase X by 1, Y goes up by 2. Look at the little triangle I've drawn.

The 'going down' line has a **gradient** of -1 . The $-$ sign tells you its going downhill. The 1 is the steepness. Can you check that gradient by drawing a small triangle?

The 'going up' line starts at 3 on the Y axis.

The 'coming down' line starts at 9 on the Y axis

The point on the Y axis where the line starts is called the **Intercept**. Summarising the facts...

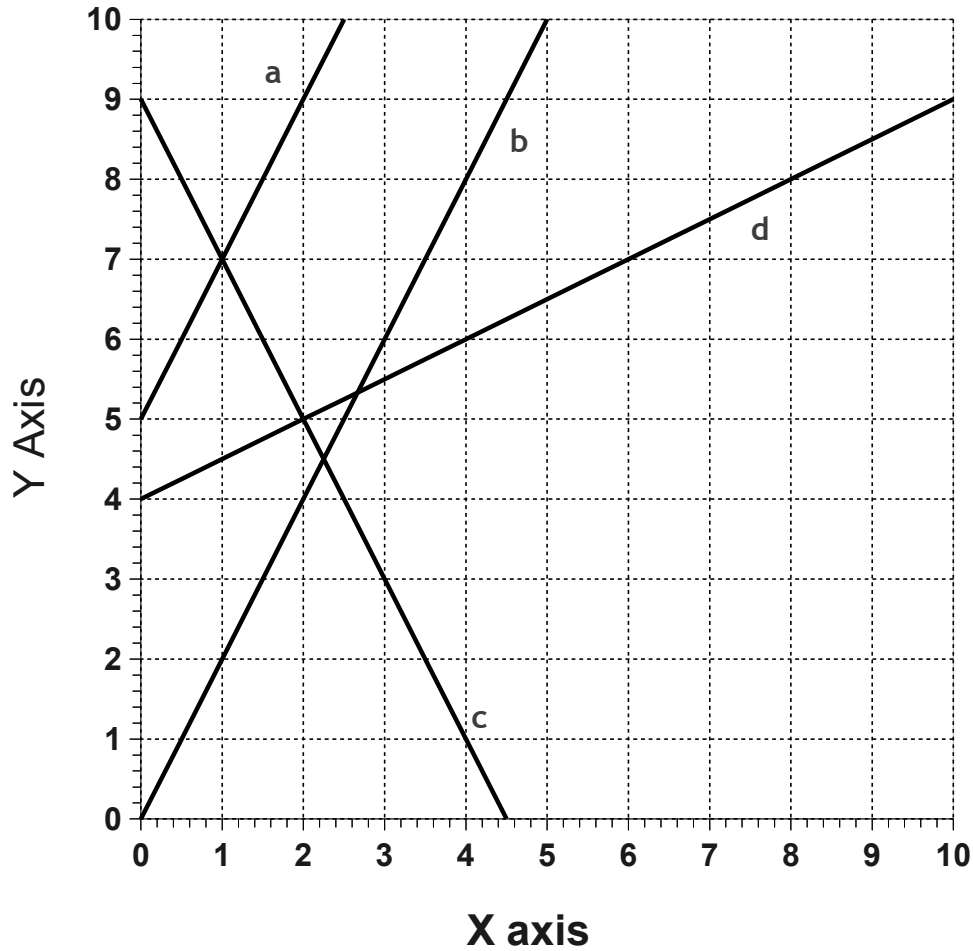
Going up line has a Gradient of 2 and an Intercept of 3

Going down line has a Gradient of -1 and an Intercept of 9

Try finding the gradient and intercepts of the lines on the graphs over the page...

Example lines

y3



For each of the lines a, b, c, d

- read off the **Gradient** (make a little triangle)
- read off the **Intercept**
- Fill the results in on the table below...

Line	Gradient	Intercept	Comments
a			
b			How do a) and b) compare? Will a) ever cross b)?
c			
d			