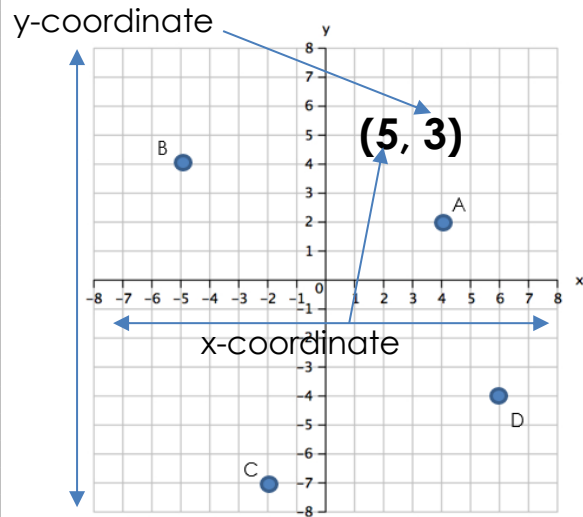


Coordinates



A(4, 2) B(-5, 4) C(-2, -7) D(6, -4)

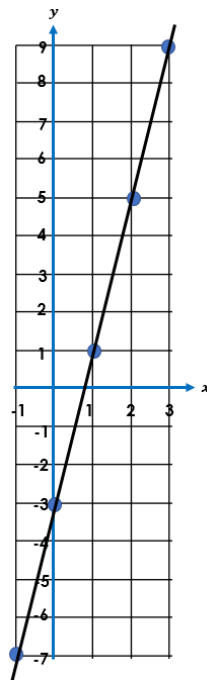
Plotting a Graph

The x coordinate is the **independent variable** and the y coordinate is the **dependent variable** (it depends on the value of x)

Plot the graph of $y = 4x - 3$ in the range $-1 \leq x \leq 3$

x	-1	0	1	2	3
y	-7	-3	1	5	9

Substitute each x value into the formula to find the y value
This gives the coordinates to plot (-1, -7), (0, -3), (1, 1), (2, 5) and (3, 9)



GRAPHS

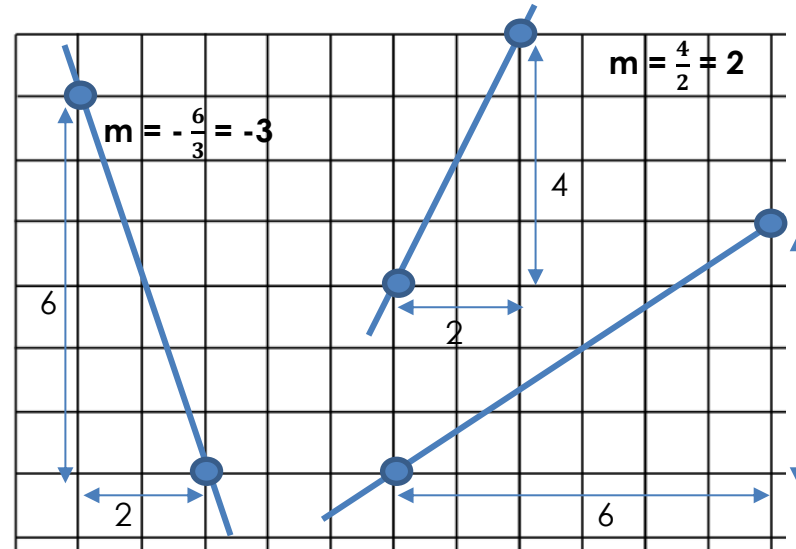
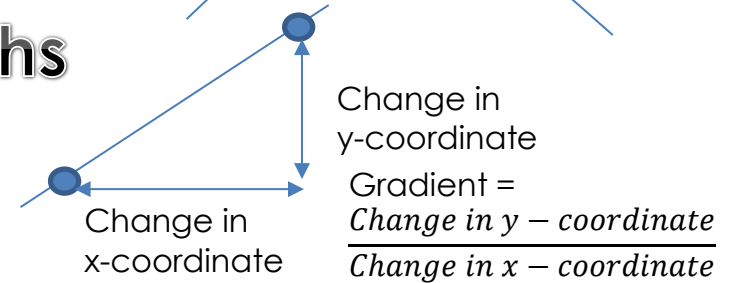
Straight Line Graphs

$$y = mx + c$$

The gradient The y-intercept

Positive Gradient

Negative Gradient



Interpreting the equation

The y-intercept: The value of y when x = 0
The gradient: For every unit change in x this is what y changes by

A taxi-firm uses this to find the cost (£C) for every mile (m) travelled

$$C = 2.3m + 1.2$$

y-intercept = 1.2: Standing charge = £1.20

Gradient = 2.3: For every mile travelled, the cost is £2.30