What careers would use these skills?

Financial analyst, engineer, architect, resource manager



Year 11 foundation topic 20

More Algebra

## Plotting graphs

You can plot any graph by filling in a table of values.

Eg.

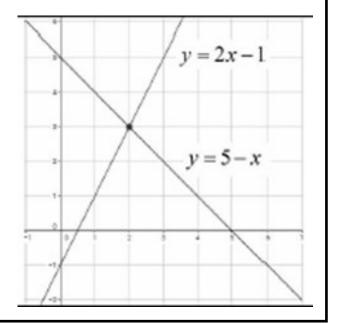
X	-3	-2	-1	0	1	2	3
Y							

### **Graphical simultaneous equations**

Draw the graphs of the two equations.

The solutions will be where the lines meet.

Solution (2,3)

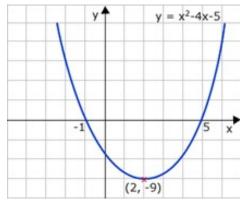


# Sketch quadratic graphs

A U-shaped curve called a parabola. The equation is in the form

 $y = ax^2 + bx + c$  where a, b and c are numbers and a  $\neq 0$ .

Eg.

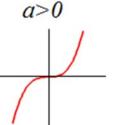


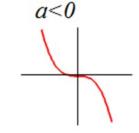
### Sketch cubic graphs

The equation is in the form  $y = ax^3 + k$ , where k is a number.

If a>0, the curve is increasing.

If a<0, the curve is decreasing.





### Reciprocal graphs

