



Line 1 has equation  $x + 6y = 9$

Write down the equation of a line parallel to Line 1.

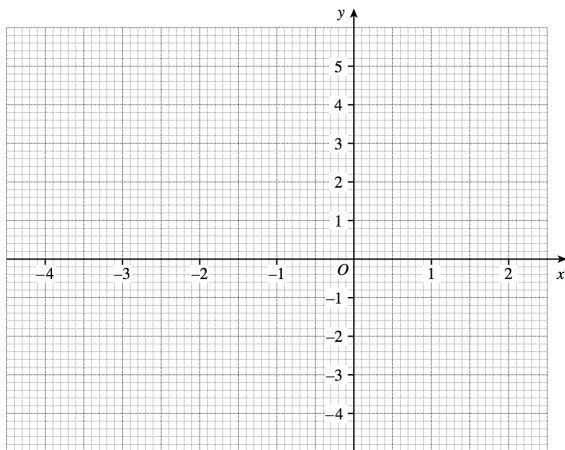
Line 2 has equation  $y = 2x - 1$

Write down the equation of a line perpendicular to Line 2.

A large bottle of cola is 18cm tall.  
A small bottle is 12cm tall.  
The bottles are mathematically similar.

David claims the small bottle contains two-thirds the amount of cola than the large bottle.

Show he is wrong.



Draw  $y = x^2 + 2x - 3$

Solve the simultaneous equations below graphically

$$y = x^2 + 2x - 3$$

$$x + y + 1 = 0$$

Solve using the quadratic formula  
 $2x^2 + x - 8 = 0$