



A straight line passes through the points A(1, 4) and B(5, 16).

$$\frac{12}{4} = 3$$

Find the equation of the line parallel to AB that passes through (1, 7)

$$y = 3x + 4$$

Write down the equation of a line perpendicular to AB

$$y = -\frac{1}{3}x + 1$$

Factorise fully  $2y^2 - 50$

$$2(y^2 - 25)$$

~~scribble~~

$$2(y-5)(y+5)$$

Harry gets the train to work in the morning.  
He works Monday to Friday.  
The probability the train is late is 0.3

Find the probability the train is late exactly three times.

$LLLO$      $OLL$     10 options  
 $LLLOL$   
 $LLLO$   
 $LLOLO$      $0.3 \times 0.3 \times 0.3 \times 0.7 \times 0.7 = 0.01323$   
 $LOLOL$   
 $LOLOL$      $0.01323 \times 10$   
 $LOLOL$   
 $OLLLO$      $= 0.1323$   
 $OLLLO$   
 $OLLLO$

Two containers are mathematically similar.

The height of container A is 5cm.  
The height of container B is 15cm  $\downarrow \times 3$

The volume of A is  $120\text{cm}^3$

What is the volume of B?

$$120 \times 3^3 = 3240 \text{ cm}^3$$