



The number of visitors that a museum had last year was 9.2×10^5 .

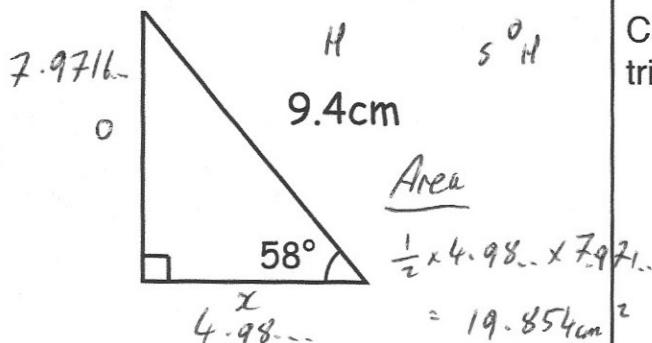
920000

This year, the museum has had 1.3×10^6 visitors.

1300000

Calculate the percentage increase.

$$\frac{380000}{920000} \times 100 = 41.3\%$$



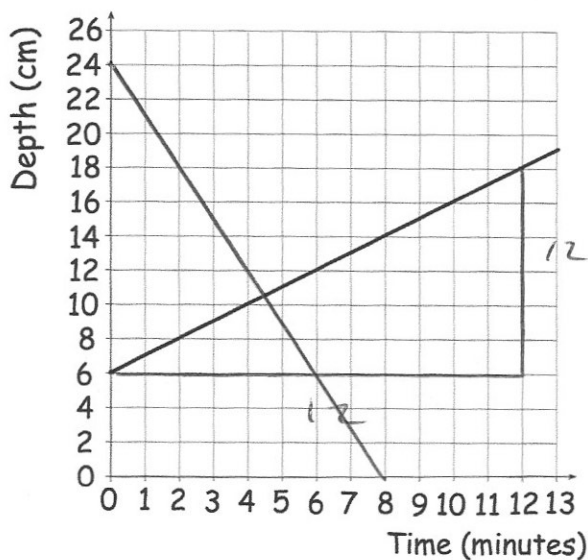
Calculate the area of the right angled triangle.

$$\sin(58) \times 9.4 = 7.9716\dots$$

$$x^2 + 7.9716\dots^2 = 9.4^2$$

$$x^2 = 24.812\dots$$

$$x = 4.98\dots\text{cm}$$



Water is poured into a swimming pool for 13 minutes
 The graph shows the depth of the water in the swimming pool.
 What is the rate of change of the depth of the water?
 Give your answer in cm/min.

$$\frac{12}{12} = 1\text{ cm/min}$$

Another swimming pool contains water that is 24cm deep.
 It is emptied at a rate of 3cm/min.
 Show this on the graph.

8min

Shapes A, B and C are similar.
 The height of shape A is 8cm
 The height of shape C is 4cm
 The ratio of the surface area of shape B to the surface area of shape C is 25:9

A : C
2 : 1

Work out the ratio of the volume of shape A to shape B.

sides 8 : 5
A : B : C 6 : 5 : 3

~~Volume~~

$$\frac{216}{125}$$