

January 26th

5-a-day

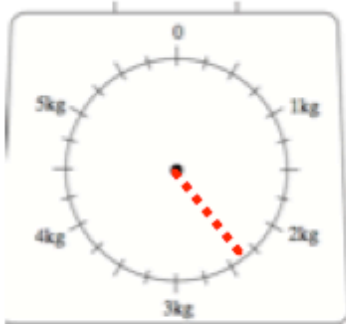
Numeracy

Write down an even number that is divisible by 3.

6 12 18
etc

Write down an odd number over 40 that is also a multiple of 7.

49 63 etc



Show 2.5kg on the scales.

To cook a chicken: allow 20 minutes per pound and add 30 minutes.

How long will it take to cook a chicken that weighs seven pounds?

$$7 \times 20 = 140 \quad 140 + 30 = 170$$

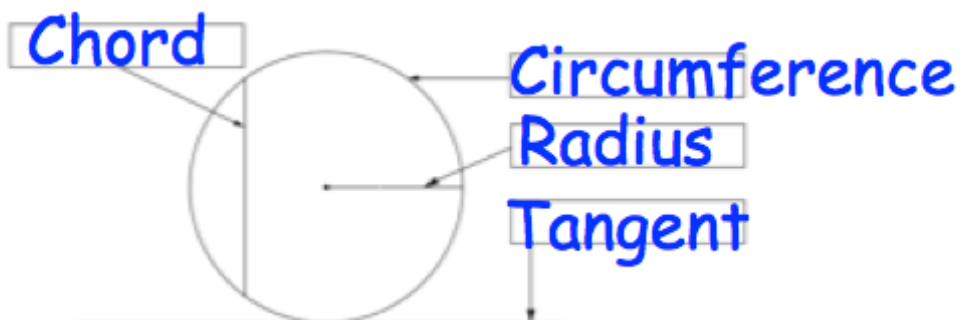
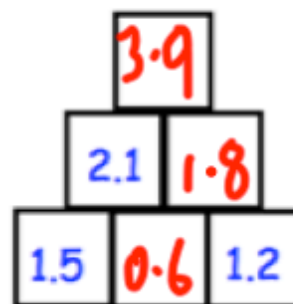
Give your answer in hours and minutes.

$$170 \text{ mins} = 2 \text{ hours } 50 \text{ mins}$$

The diagram to the right is an "addition pyramid."

To find the number in a block, add the two blocks directly beneath it.

Find the 3 missing values.





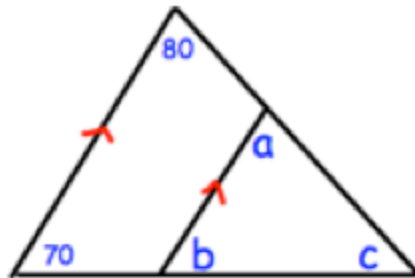
What type of correlation is shown?

No Correlation

Factorise

$$y^2 + 7y$$

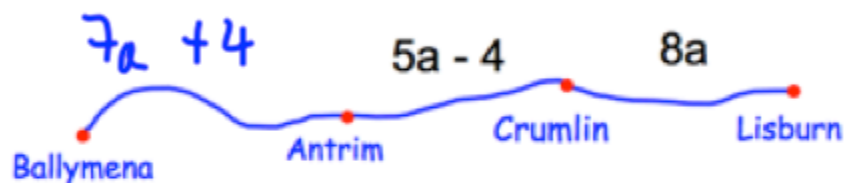
$$y(y + 7)$$



Find the size of a, b and c

$$a = 80^\circ \quad b = 70^\circ$$

$$c = 30^\circ$$



The distance from Ballymena to Lisburn is $20a$.
What is the distance from Ballymena to Lisburn?

Expand and simplify

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

$$y^2 + 7y + 10$$

James has a spinner. The probability of each number is:

Number	1	2	3	4
Probability	0.2	0.1	0.4	

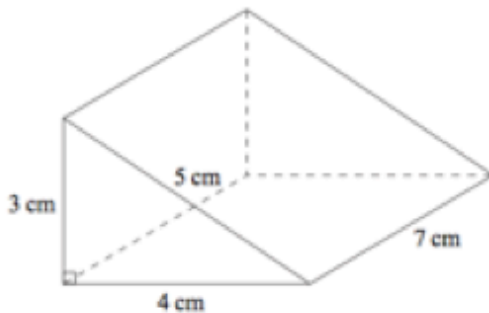
$$0.2 + 0.1 + 0.4 = 0.7$$

Find the probability of a 4.

$$0.3$$

The spinner is spun 500 times, how many 4's are expected?

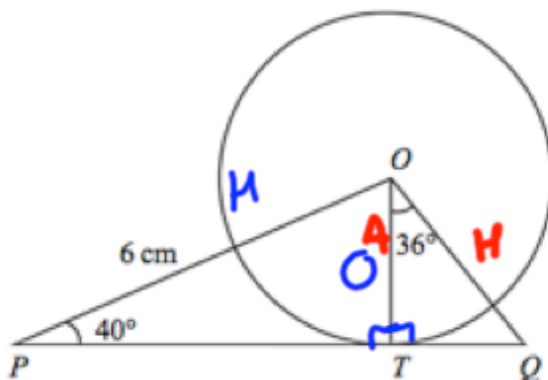
$$500 \times 0.3 = 150$$



Calculate the volume.

$$\frac{1}{2}(4 \times 3) \times 7$$

$$42 \text{ cm}^3$$



Calculate OT.

$$\sin(40) \times 6 = 3.8567 \dots \text{ cm}$$

Calculate OQ.

$$\frac{3.8567}{\cos 36}$$

$$4.767 \text{ cm}$$

Prove that

$$(3n + 1)^2 - (3n - 1)^2$$

is always a multiple of 6.

$$(3n+1)(3n+1) - (3n-1)(3n-1)$$

$$(9n^2 + 6n + 1) - (9n^2 - 6n + 1)$$

$$12n = 6(2n)$$

\therefore multiple of 6.