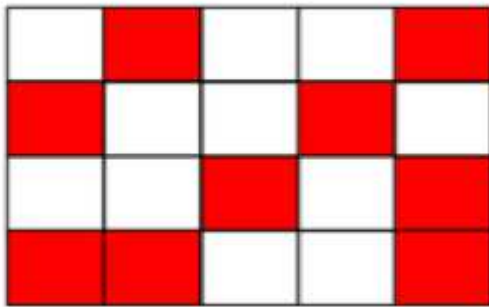


March 25th

5-a-day

Numeracy



What fraction of this shape is shaded?

$$\frac{9}{20}$$



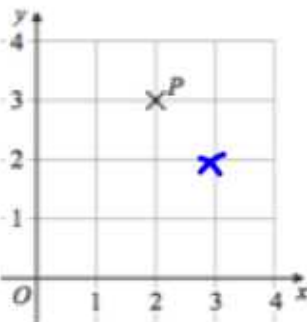
$$7 \times 20p = 140$$

Tim puts seven 20p pieces into the piggy bank.
His mum puts three of the same coin into the piggy bank.

The total value of the ten coins is £2.90.
What coins did his mum put into the piggy bank?

$$\begin{array}{r} 290 \\ - 140 \\ \hline 150 \end{array} \quad \text{+ three 50ps}$$

$$150 \div 3 = 50p$$



Write down the coordinates of P.

$$(2, 3)$$

Plot (3,2) on the grid.

Work out

$$\frac{1}{6} \text{ of the } 300$$

$$300 \div 6 = 50$$

Work out

$$\frac{3}{10} \text{ of the } 300$$

$$300 \div 10 = 30$$

$$30 \times 3 = 90$$



$$\frac{3}{4} \text{ of } 60$$

$$= 45$$

This is a biased coin. The probability of a head is $\frac{3}{4}$. It is flipped 60 times.

How many heads do you expect?

$$45$$

March 25th

5-a-day

Foundation

Write down the cube root of 27

3

Write down the cube root of 216

6

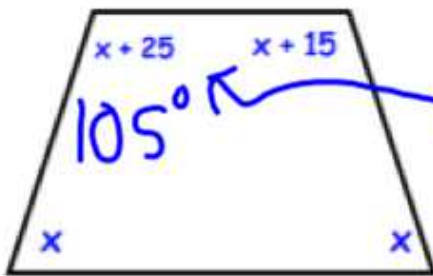
Claire spins a spinner 300 times. It is blue 60 times.

What is the relative frequency of a blue?

$$\frac{60}{300} = \frac{1}{5}$$

If the spinner is spun 450 times, how many times should she expect blue?

$$\frac{1}{5} \text{ of } 450 = 90$$



Calculate the size of the largest angle

$$\begin{aligned} x+25 + x+15 + x + x &= 360 \\ 4x + 40 &= 360 \\ 4x &= 320 \\ x &= 80 \end{aligned}$$

105°

8 10 12 14

2 4 6 8

Calculate the nth term

$$2n + 6$$

Work out the 100th term in this sequence

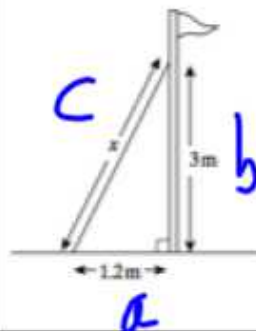
$$206$$

Calculate the length of x

$$1.2^2 + 3^2 = x^2$$

$$10.44 = x^2$$

$$x = \sqrt{10.44} = 3.23\text{m}$$



March 25th

5-a-day

Higher

Work out

$$4^0$$

1

Work out

$$2^{-2}$$

$$\frac{1}{4}$$

A boy is training for a race.
Each week he runs 10% more than the
previous week.

If he runs 200m in week 1, how far will
he run in week 12?

$$200 \times 1.1^{11}$$
$$= 570.6 \text{ m}$$

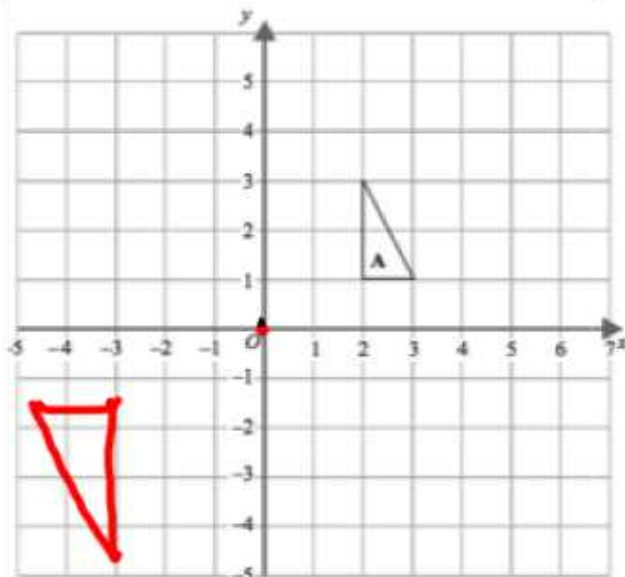
Solve

$$2x - 3y = 7$$

$$3x + 5y = 1$$

$$\begin{array}{r} 10x - 15y = 35 \\ 9x + 15y = 3 \\ \hline 19x = 38 \\ x = 2 \end{array}$$

$$\begin{array}{r} 4 - 3y = 7 \\ -3y = 3 \\ y = -1 \end{array}$$



Enlarge A by scale factor - 1.5, centre O.