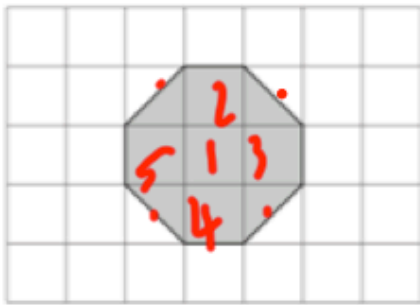


February 6th

5-a-day

Numeracy



The octagon is drawn on a centimetre grid

What is the area of this octagon?

$7 \text{ cm}^2$

Victoria says the perimeter of the octagon is 8cm.

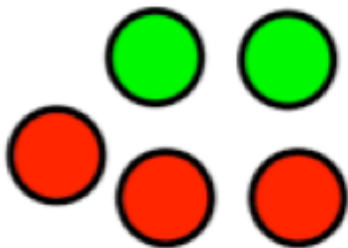
Explain why she is wrong.

The diagonals are longer than the verticals & horizontal

Add together 1.5, 2.7 and 1.1

$5.3$

greater than 1cm each



Holly selects a sweet at random.

What is the probability of her selecting a green sweet?

$\frac{2}{5}$

Gareth adds his sweets to Holly's sweets.

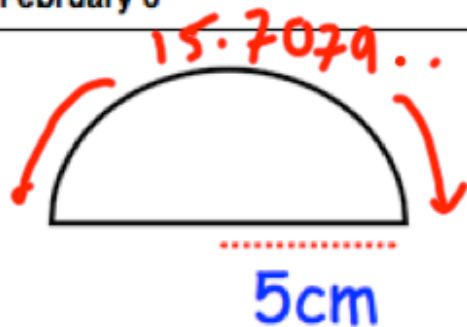
There is now an equal chance of selecting a green, red or yellow sweet.

1 green & 3 yellow

Write down what sweets Gareth may have had.

or 1 red 2 green  
4 yellow  
etc.

February 6th	5-a-day	Foundation
<p>The ratio of red beads to white beads on a necklace is 3:2. <math>3+2=5</math></p> <p>What fraction of the beads are red?</p> $\frac{3}{5}$		<p>There are 45 red beads, how many white beads are there?</p> $45 \div 3 = 15$ $15 \times 2 = 30$
<p>If <math>y = 14</math> and <math>x = -2</math>, work out the value of:</p> $\frac{y + 20}{x}$ $\frac{14 + 20}{-2}$		$\frac{34}{-2} = -17$
<p>How much money do you spend on magazines?</p> <p>£5-£10 £10-£20 Over £20</p>		<p>Write down one criticism of the question.</p> <p>time scale</p>
<p>Write down two criticisms of the response section.</p> <p>below £5 £10 - overlapping groups</p>		
<p>The probability of a team winning a match is 0.4.</p> <p>The probability of the team drawing a match is 0.5.</p> <p>The team play 30 games a season.</p>		<p>How many matches should they lose?</p> $0.4 + 0.5 = 0.9$ $1 - 0.9 = 0.1$ $30 \times 0.1 = 3$



Calculate the perimeter of this semi-circle.

$$(\pi \times 10) \div 2 = 15.70\dots$$

$$15.70\dots + 10 = 25.71\text{cm}$$

The ratio of the sizes of angles in a quadrilateral is 1:2:2:5

$$1 + 2 + 2 + 5 = 10$$

$$360 \div 10 = 36^\circ$$

Work out the size of each angle.

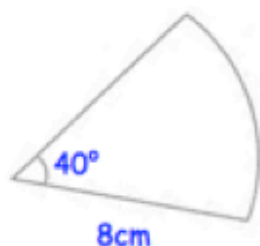
$$1 \times 36 = 36^\circ$$

$$2 \times 36 = 72^\circ$$

$$2 \times 36 = 72^\circ$$

$$5 \times 36 = 180^\circ$$

Find the area of the sector.



$$\frac{40}{360} \times \pi \times 8^2$$

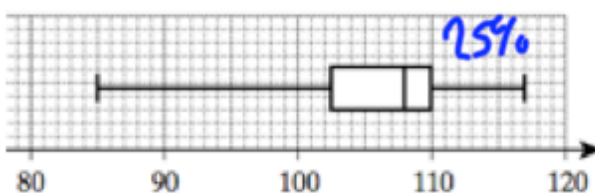
$$22.34\text{cm}^2$$

Write down the Sine Rule

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Write down the Cosine Rule

$$a^2 = b^2 + c^2 - 2bc \cos A$$



The IQs of some children are shown above.

Two are chosen at random.

What is the probability of both have an IQ over 110?

$$\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$$