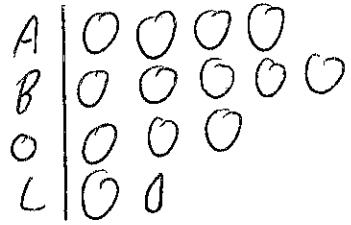


Name: _____

December 31st	5-a-day	Numeracy
<p>How many seconds are in 30 minutes?</p> <p style="text-align: center;">$30 \times 60 = \underline{1800}$</p>		<p>How many seconds are in 1 hour?</p> <p style="text-align: center;">3600</p>
<p>2,825 people went to a rugby match.</p> <p>Tickets were £5 each.</p> <p>How much money was paid in total?</p>		<p style="text-align: center;">£ 14,125</p>
<p>A greengrocer sold:</p> <p>8 apples 10 bananas 6 oranges 3 lemons</p> <p>Draw a pictogram to represent this</p>		 <p style="text-align: center;">○ means 2</p>
<p>Solve $8w = 24$</p> <p style="text-align: center;">$w = 3$</p>		<p>Solve $2w + 1 = 15$</p> <p style="text-align: center;">$2w = 14$</p> <p style="text-align: center;">$w = 7$</p>
<p>8 3 4 2 1 9</p> <p>Work out the median</p> <p style="text-align: center;">8 3 3 4 2 1 9</p> <p style="text-align: center;">3.5</p>		<p>Work out the range</p> <p style="text-align: center;">$9 - 1 = 8$</p>

Name: _____

December 31

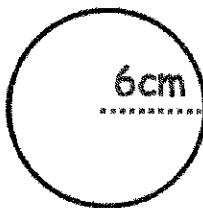
5-a-day

Foundation

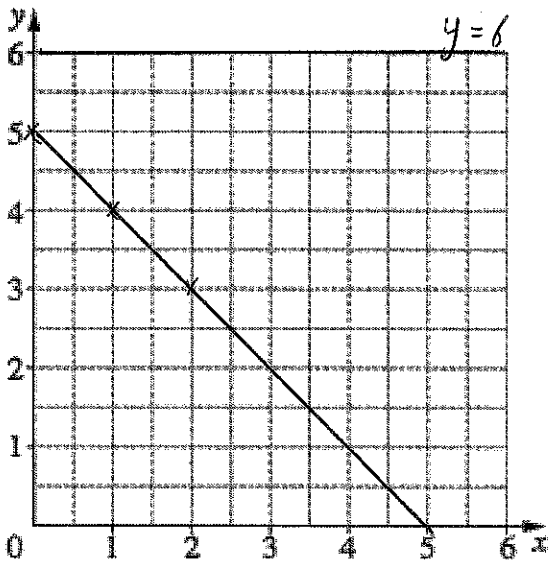
Factorise $x^2 + 3x$

$$x(x + 3)$$

Find the circumference



$$\begin{aligned} &\pi \times 12 \\ &= 12\pi \text{ cm} \\ &\text{or} \\ &= 37.7 \text{ cm (to 1 decimal place)} \end{aligned}$$



Draw $y = 6$

Draw $x + y = 5$

x	0	1	2
y	5	4	3

$$3x^2 + 10$$

Work out the value if $x = 5$

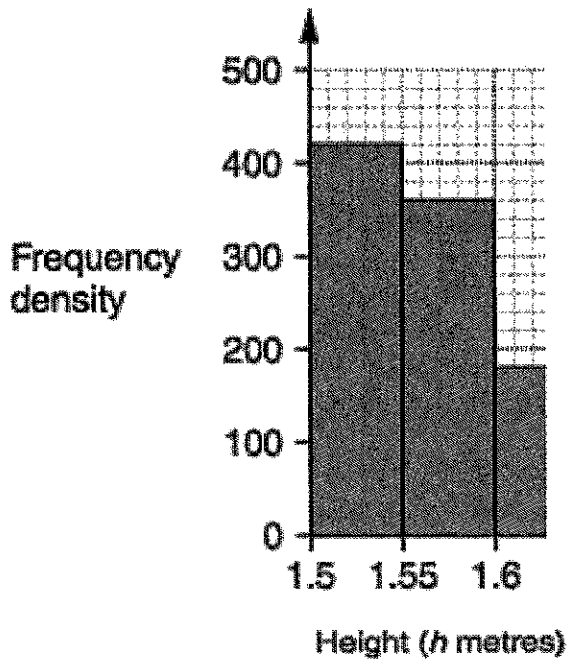
$$\begin{aligned} &3 \times 5^2 + 10 \\ &= 3 \times 25 + 10 \\ &= 75 + 10 \\ &= 85 \end{aligned}$$

Name: _____

December 31

5-a-day

Higher



How many people had a height $1.5 \leq h < 1.55$?

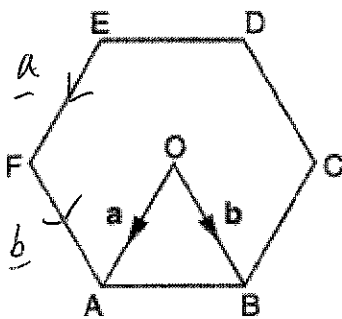
$$420 \times 0.05$$

$$21$$

How many people had a height $1.55 \leq h < 1.6$?

$$360 \times 0.05$$

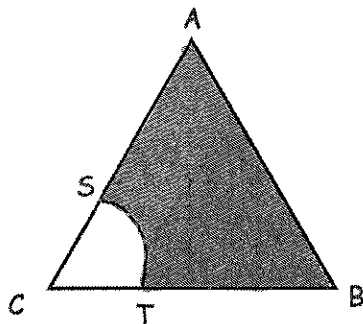
$$18$$



Find in terms of a and b

AB $-\underline{a} + \underline{b}$

EA $\underline{a} + \underline{b}$



Shown is an equilateral triangle ABC with side length 5cm.

CS and CT are both 2cm.
CST is a sector of a circle, centre C.

Calculate the percentage of the triangle shaded.

Triangle (area): $\frac{1}{2} \times 5 \times 5 \times \sin 60$
 $= 10.825 \dots \text{cm}^2$

Sector: $\frac{60}{360} \times \pi \times 2^2$
 $= 2.094 \dots \text{cm}^2$

$$\frac{2.094 \dots}{10.825 \dots} \times 100$$

$$= 19.34\%$$