July 4th	5-a-day	Numeracy

Work out 638 + 873

638
873
1511

1200 - 484

1200
- 484
716

108 ÷ 4

27
4 | 10 8

27

Work out

$\frac{3}{8}$ of 48

48 ÷ 8 = 6
6 x 3 = 18

Fraction	Decimal	Percentage
$\frac{9}{100}$	0.09	9%
$\frac{15}{100} = \frac{3}{20}$	0.15	15%
$\frac{4}{5}$	0.8	80%

Arrange in order, starting with the smallest.

0.750 0.800 0.335

0.335 0.75 0.8

Work out ~~638 + 873~~

0.1 x 0.2

0.02

July 4	5-a-day	Foundation

Solve $7x + 13 = 9x + 1$

$13 = 2x + 1$

$12 = 2x$

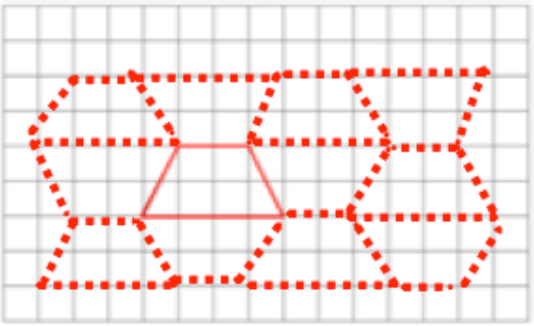
$x = 6$

The diameter of a circle is 5.5cm.

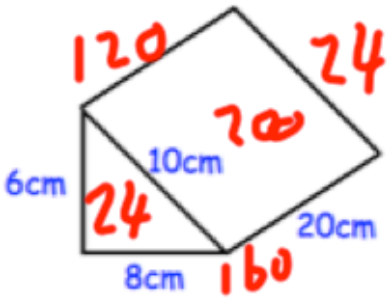
Calculate the circumference of a circle to 1 decimal place.

$\pi \times 5.5$

$= 17.3\text{cm}$



Show how the trapezium can tessellate.



Calculate the surface area

200
160
120
24
24
528

528cm^2

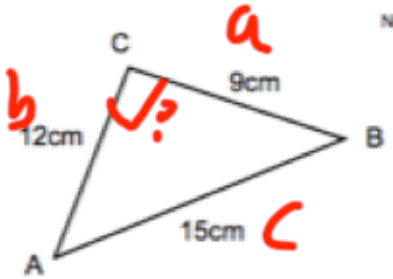
Is this triangle right-angled? yes

$a^2 + b^2 = c^2$

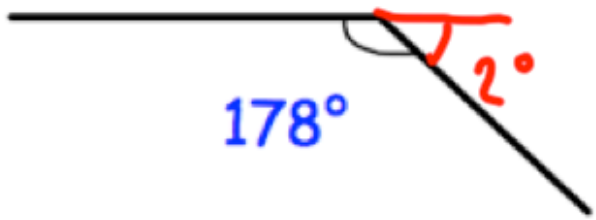
$9^2 + 12^2 = 15^2$

$81 + 144 = 225$

$225 = 225$ ✓



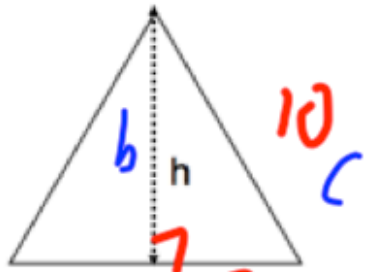
July 4	5-a-day	Higher



Shown is one angle from a regular polygon.

How many sides does it have?

$360 \div 2 = 180$ sides



Find the height of this equilateral triangle.

$a^2 + b^2 = c^2$

$5^2 + b^2 = 10^2$

$25 + b^2 = 100$

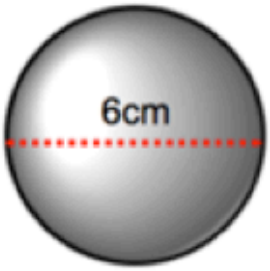
$b = \sqrt{75}$

$b = 8.66$

Simplify fully

$$\frac{w}{2} \div \frac{w}{6}$$

$$\frac{w}{2} \times \frac{6}{w} = \frac{6w}{2w} = 3$$



$\frac{4}{3}\pi r^3$

Find the volume of this sphere.

$\frac{4}{3} \times \pi \times 3^3$

$= 36\pi$

$= 113.1 cm^3$

Expand fully.

$x(x + 1)(x - 2)$

$x(x^2 - 2x + x - 2)$

$x(x^2 - x - 2)$

$x^3 - x^2 - 2x$