Starter

1. Solve
   a. $5x - 3(2x + 1) = 7$ b. $10(x + 3) < 8x + 12$

2. Find the volume of a cone with height 15cm and radius 3cm.

3. Find the angle at the centre of a sector with a radius of 6mm and an arc length of 2.33mm.

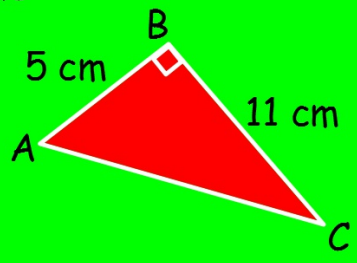
4. A straight line passes through the points (0, -5) and (6, -8).
   a. Find the equation of this line.
   b. Does the point (1, -12) lie on the line?

Starter

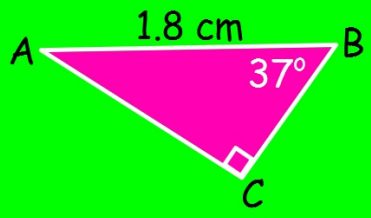
1. A promotional tin of Heinz tomato soup offers 12.5% extra free. If a promotional tin contains 675ml of soup, how much is in a standard tin?

2. Find the gradient and y-intercept of each line below.
   a. $4y - 8 = 16x$ b. $x - 5y = 9$ c. $y = 9$

3. Find AC
   a.



   b.



4. Find the radius of a hemisphere with a volume of $10cm^3$.

Starter

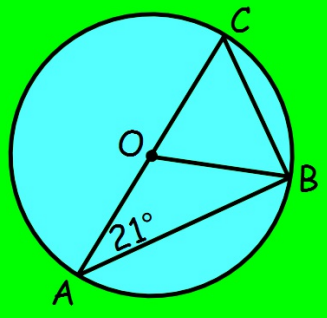
1. If Eva puts £2500 in a bank account with an interest rate of 1.4% per annum, calculate the compound interest earned after 10 years.

2. Find the distance between the points (3, 7) and (-1, -5).

3. Solve

$$\frac{5x}{4} + \frac{x}{6} = \frac{3}{8}$$

4. Find the size of angle BOC.



Starter

1. Jimmy bought a bunch of flowers that had been reduced by 70% for £4.20. What was the original price of the flowers?

2. a. 0.16×3000 b. $35000 \div 700$ c. $(-3)^4 - (-5)^3$

3. Find the distance between the points (-4, 3) and (-1, 10).

4. Solve the following:

$$7k - 2k(3k - 5) + 6 = 5(2k - 1) - k(6k + 2)$$

Starter

1. Solve
   a. $8x - 3(2x + 3) = 10$ b. $5(2x + 1) < 8x + 13$

2. Find the volume of a cylinder with height 10cm and radius 5cm.

3. Find the angle at the centre of a sector with a radius of 10mm and an arc length of 12mm.

4. A straight line passes through the points (0, 6) and (6, -8).
   a. Find the equation of this line.
   b. Does the point (2, 3) lie on the line?