Round all answers to an appropriate degree of accuracy unless specifically stated
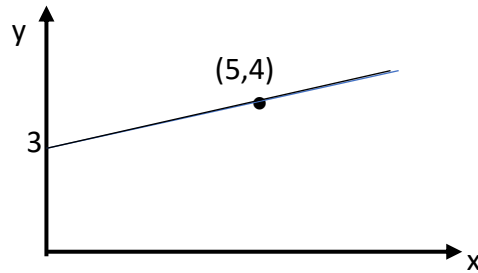
1. Work out the volume of a hemisphere with radius 14cm. Round your answer correct to 3 significant figures.

2. Find the equation of the line below

3. Factorise $a^2 - 7a + 12$

4. Two rockets are flying into space. One is flying at a speed of 5.44×10^{17} km/hr.

   The second one is flying at a speed of 3.264×10^{19} km/hr.

   How many times faster than the first rocket is the second rocket flying?

5. Rationalise the denominator and simplify

$$\frac{4}{\sqrt{8}}$$

6. In its first year after opening, a coffee shop made a profit of £5600.

   Its profits are expected to increase by 4.5% for each of the next 5 years.

   Calculate its expected profit in 5 years time. Round your answer to the nearest £10.