

# M6 = 20 days to go!

3 (a) Fill in the next two terms of this sequence.

14, 13, 11, 8, 4, -1 [2]

$\begin{array}{ccccccccc} & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & & & \\ -1 & -2 & -3 & -4 & -5 & & & & \end{array}$

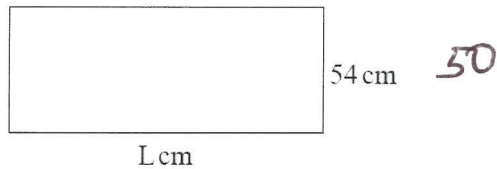
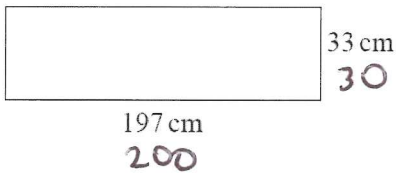
(b) Write down the name of the numbers in the sequence below.

1, 8, 27, 64, ...

$1^3$        $2^3$        $3^3$        $4^3$   
 $4 \times 4 \times 4$

Answer Cube [1]

11

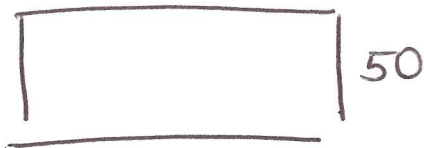


The two rectangles above have the same area.

Using estimation, work out an estimate for the length, L, of the second rectangle.

$$\begin{aligned}
 & 33 \times 197 \\
 & \approx 30 \times 200 \\
 & \approx 6000 \text{ cm}^2
 \end{aligned}$$

Answer L = 120 cm [2]



$$\begin{aligned}
 50 \times L &= 6000 \\
 L &= 6000 \div 50 \\
 L &= \frac{600}{5}
 \end{aligned}$$

8 (a) Calculate the size of angle  $x$ .

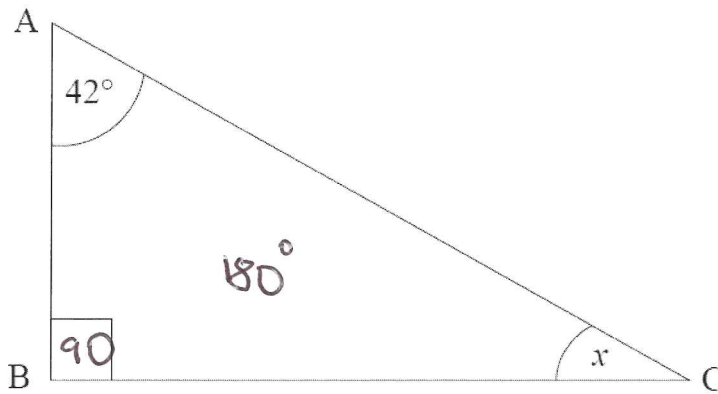
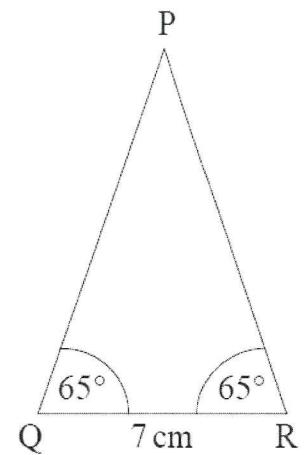
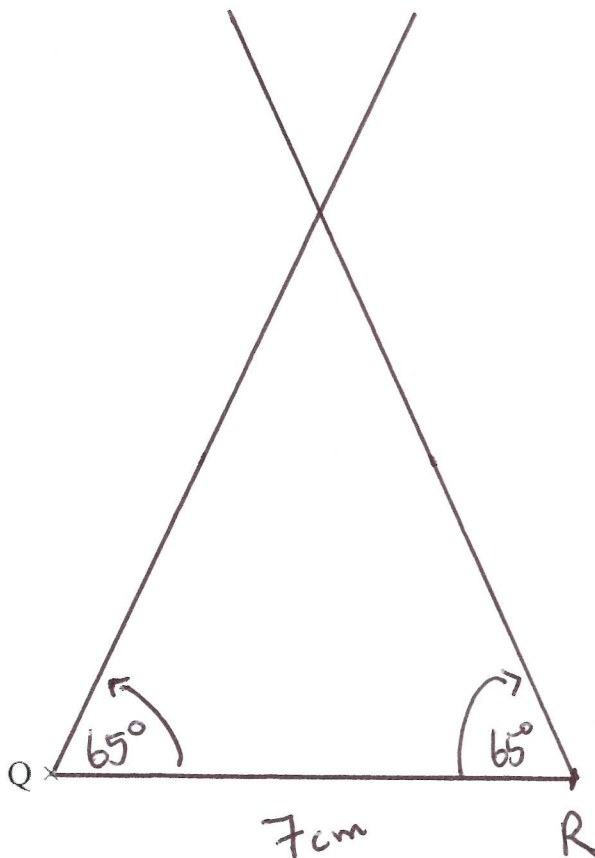


diagram not  
drawn accurately

$$90 + 42 + x = 180^\circ$$
$$132 + x = 180^\circ$$

Answer  $48^\circ$  [2]

(b) Make an accurate drawing of the triangle sketched below.



[3]