

m3 = 27 days to go!

7

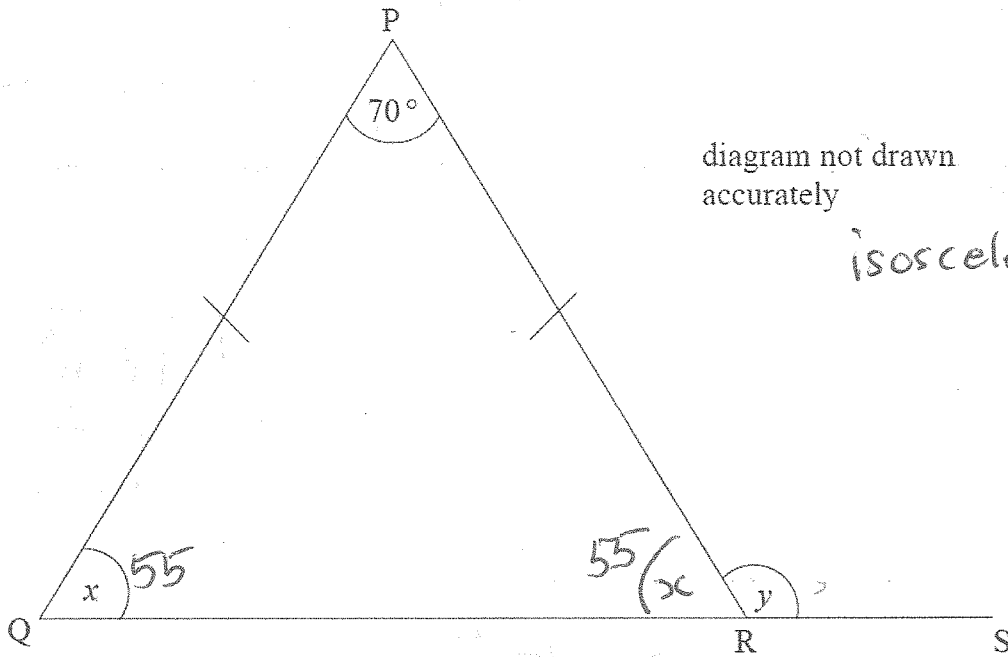


diagram not drawn accurately

isosceles triangle

PQR is an isosceles triangle with $PQ = PR$.
QRS is a straight line.

(a) Work out the size of the angle marked x .

$$\begin{array}{r} 180 \\ - 70 \\ \hline 110 \end{array}$$

$$110 \div 2 = 55$$

angles in an isosceles triangle

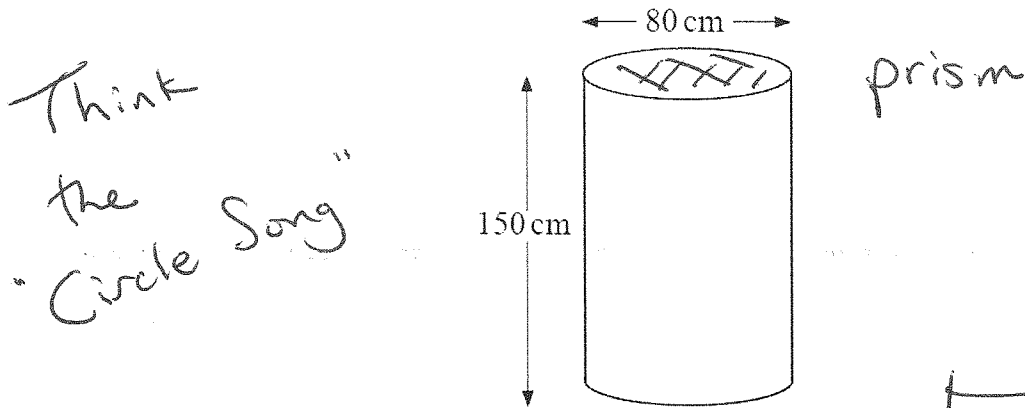
Answer 55 ° [2]

(b) Work out the size of the angle marked y .

angles along a straight line

Answer 125 ° [1]

18 A cylindrical tank has a diameter of 80 cm and a height of 150 cm as shown.



Calculate the volume of water the tank can hold when full.

Give your answer correct to the nearest litre.

$$1 \text{ cm}^3 = 1 \text{ ml}$$

Know this!

$$\begin{aligned} \text{Area circle} &= \pi \times r^2 \\ &= \pi \times 40^2 \\ &= 5026 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \text{Volume} &= \text{Area} \times \text{Length} \\ &= 5026 \times 150 \\ &= 753982 \text{ cm}^3 \\ &= 753982 \text{ ml} \end{aligned}$$

Answer 754 litres [4]

↑
look!



$$1 \text{ cm}^3 = \text{approx sugar cube} = 1 \text{ ml}$$

$$753982 \text{ ml} = \underline{754} \text{ litres (nearest litre)}$$

Remember

$$1 \text{ litre} = 1000 \text{ ml}$$