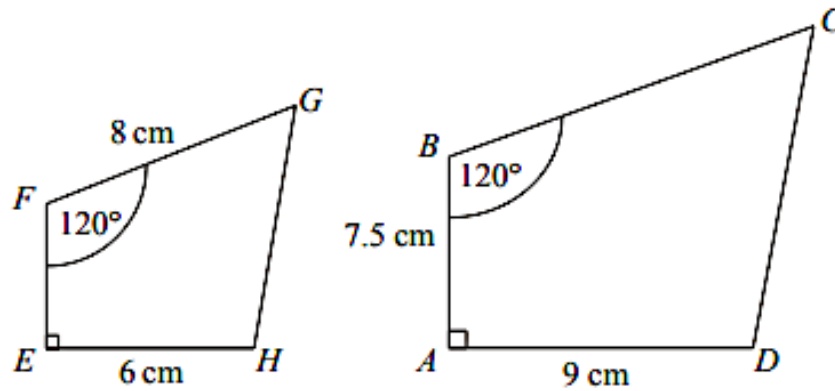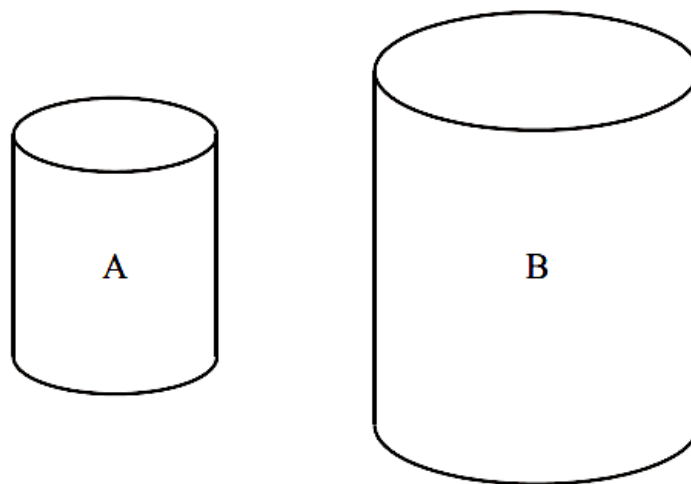## Similar Figures – Questions

Q1) The shapes ABCD and EFGH are mathematically similar.

Calculate the length of BC.

Q2) Two cylinders, A and B, are mathematically similar.

Cylinder A has a height of 8 cm and cylinder B has a height of 16 cm.
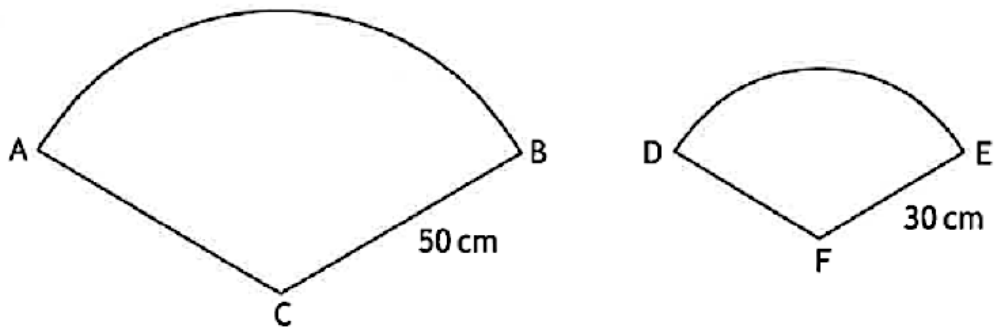
The surface area of cylinder A is 40 cm^2.

Calculate the surface area of cylinder B.

Q3) In the diagram

ABC is a sector of a circle, centre C

DEF is a sector of a circle, centre F

The sectors are mathematically similar.

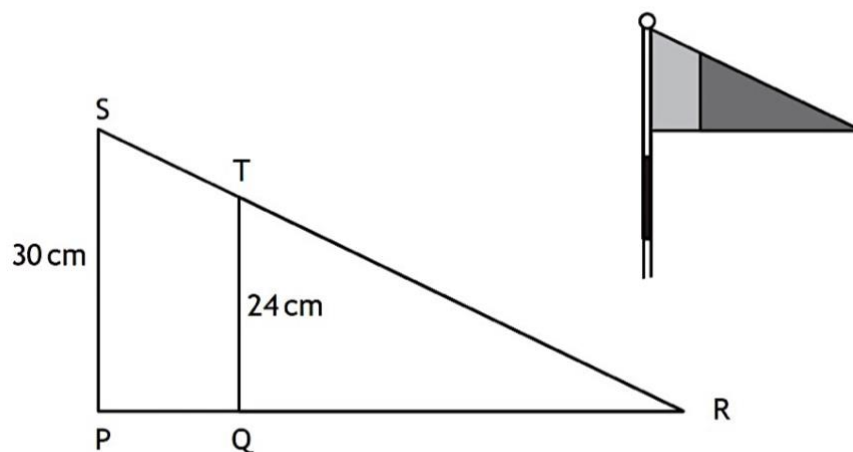The area of the larger sector, ABC, is 2750 square centimetres.

Calculate the area of the smaller sector, DEF.

Q4) The flag at each hole on a golf course is coloured red and blue.

The diagram below represents a flag.

Triangle QRT represents the red section.

PQTS represents the blue section.

Triangles PRS and QRT are mathematically similar.

The area of triangle QRT is 400 square centimetres.

Calculate the area of PQTS, the blue section of the flag.

Similar Figures – Questions

Q1) $BC = 12\ cm$

Q2) Area $= 160\ cm^2$

Q3) Area $= 990\ cm^2$

Q4) Area $= 225\ cm^2$