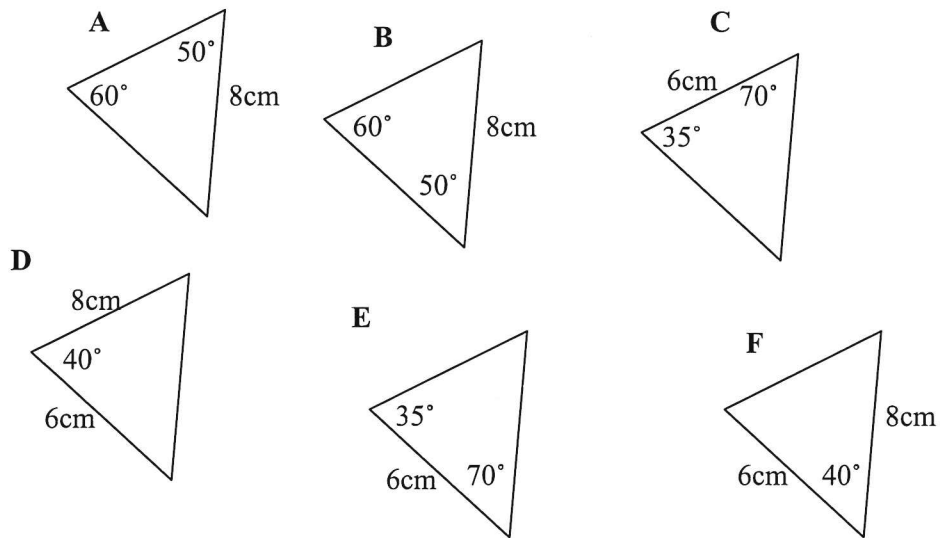# CONGRUENT TRIANGLES NON-CALCULATOR

NOTE: ALL DIAGRAMS **NOT** DRAWN TO SCALE.

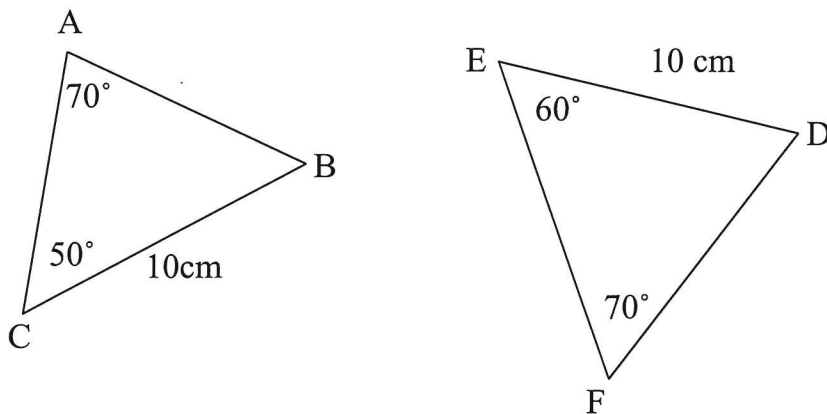* means "may be challenging for some"

1. Which triangles are congruent? Give reasons.

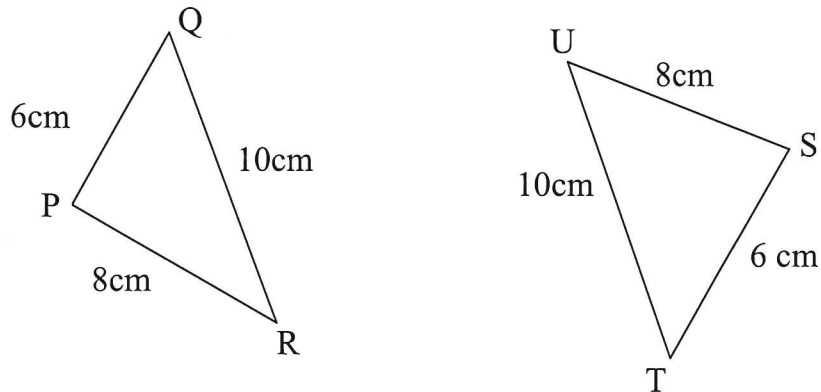2. Prove that the triangles ABC and DEF are congruent.
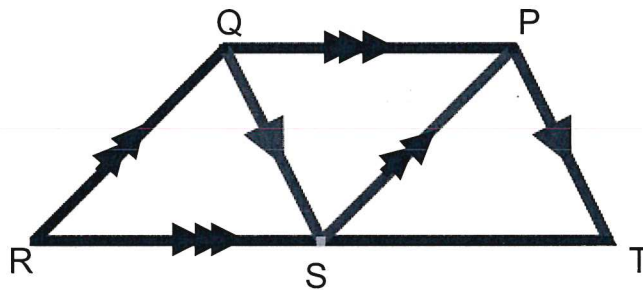
Diagrams not drawn to scale

3. Prove that the triangles PQR and STU are congruent.

Diagrams not drawn to scale

4. PQRS is a parallelogram. The line drawn from P parallel to QS meets RS produced at T.
   Prove that TS = SR.

Diagram not drawn to scale

5. The triangle PQR is an isosceles triangle. PS is perpendicular to QR.
   (a) Use congruent triangles to prove that SQ = SR.
   (b) If PQ = 10cm and QR = 12cm, work out the area of the triangle PQR.

Diagram not drawn to scale