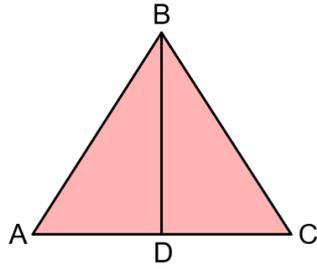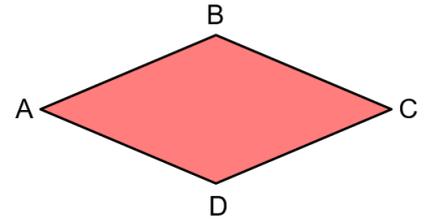# Congruent Triangle Proof

(a)

The diagram shows an equilateral triangle. BD is perpendicular to AC. Prove that triangles ABD and CBD are congruent.
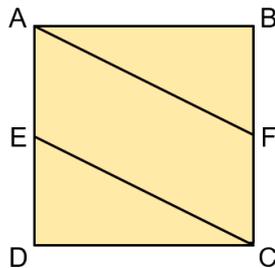
(b)

The diagram shows a rhombus ABCD. Prove that triangles ABC and ADC are congruent.
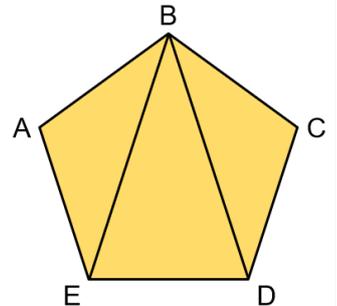
(c)

ABCD is a square. E is the midpoint of AD and F is the midpoint of BC. Prove that triangles ABF and CDE are congruent.
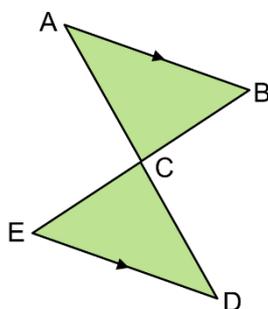
(d)

ABCDE is a regular pentagon. Prove that triangles ABE and CBD are congruent.

(e)

In the diagram, AB and DE are parallel, and C is the midpoint of BE. Prove that triangles ABC and CDE are congruent.

(f)

ABCD is a trapezium. ABE is an isosceles triangle where AE = BE, and E is the midpoint of CD. Prove that triangles ADE and BCE are congruent.