Angles in a Triangle **Answers**
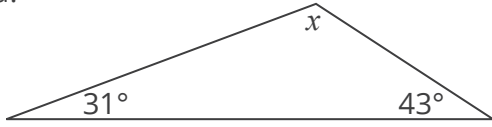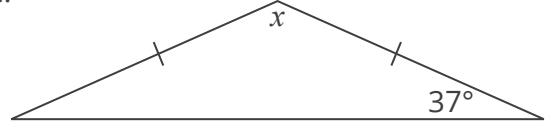
1. Find the missing angle marked x in each triangle.

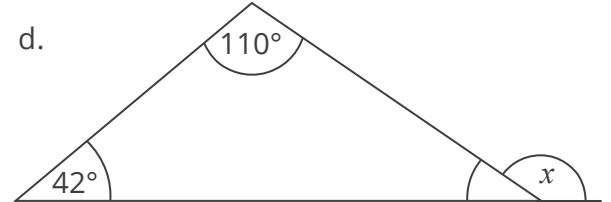   a.

   106°

   c.

   106°

   b.

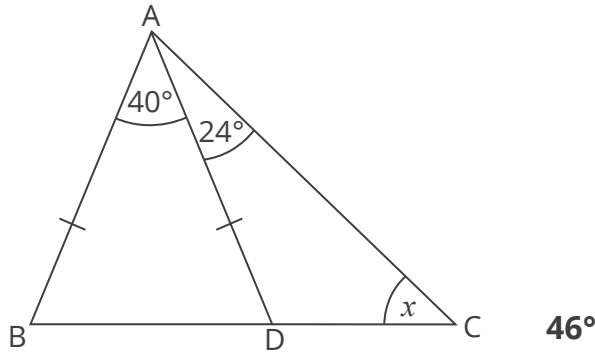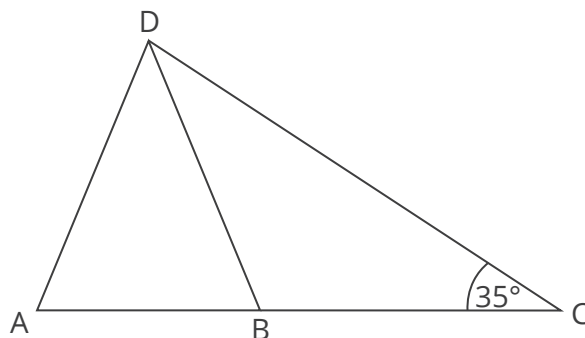
   39°

   d.

   152°

2. Find the size of the angle marked x.

      46°

3. Triangles ABD and BCD are isosceles. Is triangle ACD an isosceles triangle?

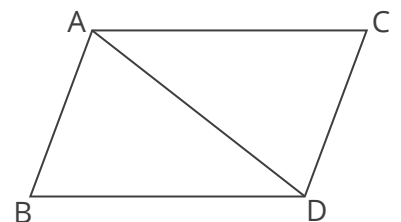   Explain your answer mathematicaly.

   No, since angle BAD = 70° and angle ADC = 75°

4. Prove that if I join the opposite corners of a parallelogram, I get two congruent triangles.

   AB = CD and AC = BD because opposite sides in a parallelogram are equal.
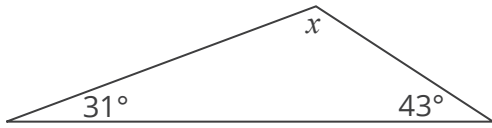
   AD is a shared side.

   Therefore, triangle ABD and ACD have all three sides the same.
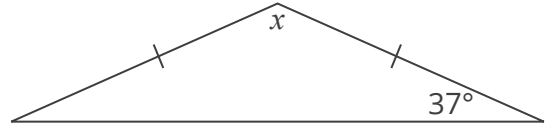
Angles in a Triangle

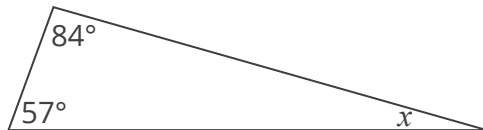1. Find the missing angle marked x in each triangle.

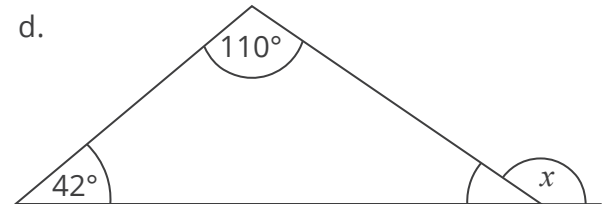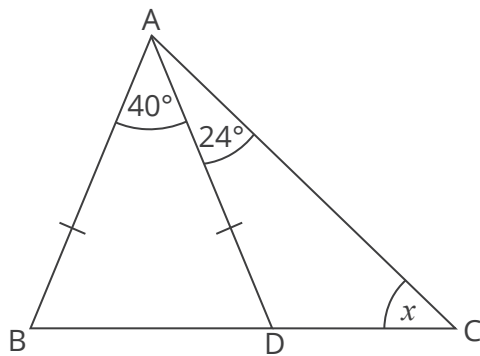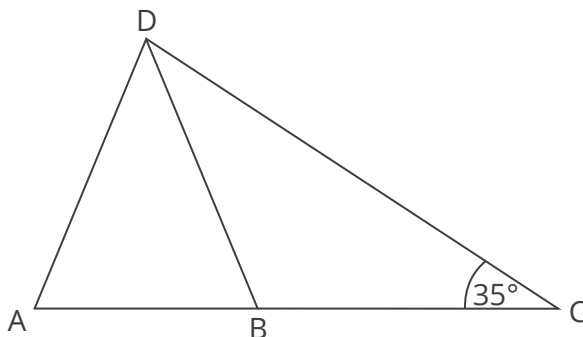   a.

   c.

   b.

   d.

2. Find the size of the angle marked x.

3. Triangles ABD and BCD are isosceles. Is triangle ACD an isosceles triangle? Explain your answer mathematicaly.

4. Prove that if I join the opposite corners of a parallelogram, I get two congruent triangles.