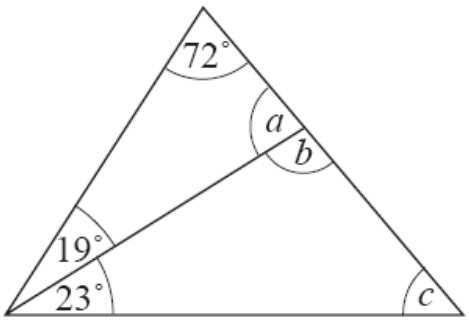
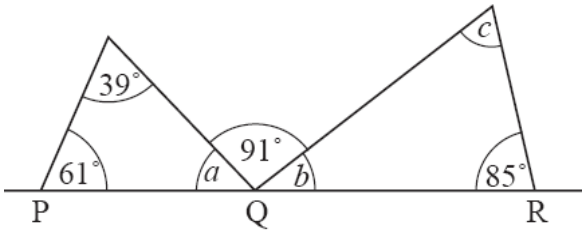
Name: _____

Triangles and Angles

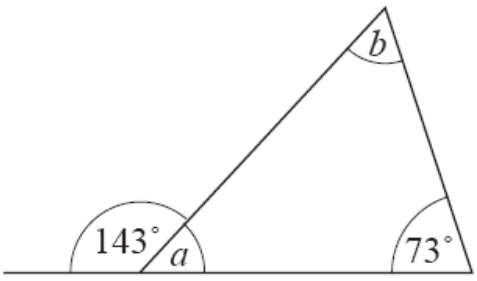
1) Determine the sizes of the angles marked a, b and c in the diagram shown.



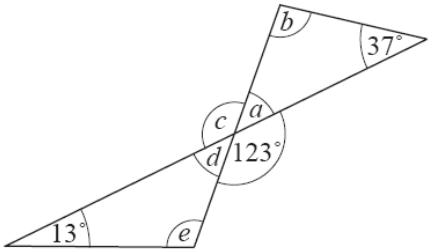
2) PQR is a straight line. Determine the sizes of the angles marked a, b and c in the triangles shown.



3) Calculate the sizes of the angles marked a and b in the diagram.



4) Calculate the sizes of the angles marked a, b, c, d, and e in the triangles shown.



5) The measures of the sides of an equilateral triangle are: x+12, 3x-8, and 2x+2. What is the measure of each side of the triangle?

6) The lengths of the sides of an isosceles triangle are represented by 2x+5, 2x-6, and 3x-3. What are the lengths of the sides of the triangle? (Hint: length of a line segment is a positive quantity)

7) The measures of the sides of an isosceles triangle are represented by x+5, 3x+13 and 4x+11. What are the measures of each side of the triangle. Two answers are possible.

8) The degree measures of the acute angles of an obtuse triangle can be represented by 5a+12 and 3a-2. If the sum of the measures of the acute angles is 82, find the measures of each of the acute angles.