TOPIC 7-2: MORE SIMILAR POLYGONS

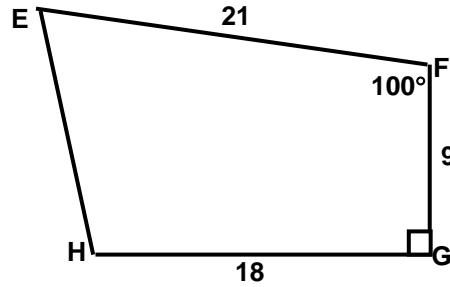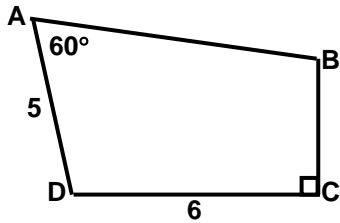| TERM	DEFINITION
SIMILAR POLYGONS	Polygons with the same shape but different sizes.

EXAMPLE 1 Determine if the figures are similar. Justify your answer.
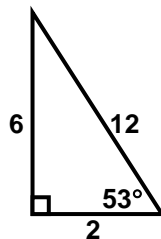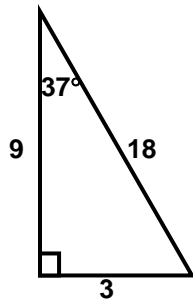
The two figures _____ similar because

_____

and _____.

EXAMPLE 4 Quad ABCD ~ Quad EFGH below.

a) **Complete the following:**

   m∠E = _____

   m∠G = _____

   m∠B = _____

   m∠H = _____

b) **What is the common ratio of Quad ABCD to Quad EFGH?_____**

c) **Find the following:**

   EH = _____

   BC = _____

   AB = _____

EXAMPLE 5 The lengths of the sides of a triangle are in the ratio 3:5:7. Its perimeter is 120 cm. Find the length of the shortest side of the triangle.

EXAMPLE 6 The measures of the angles of a triangle are in the ratios 1:2:3. Find the measure of the largest angle.