BASIC GEOMETRIC CONSTRUCTIONS / REGULAR POLYGONS / CIRCLE / SOLVING PROBLEMS INVOLVING SIDES AND ANGLES OF POLYGONS

Name: _____ Score: _____
Grade Level: _____ Name of School: _____

Direction: Read each item carefully and write the letter of the correct answer.

1.If the first three angles of a quadrilateral measures 54°, 86°, and 70° respectively. What is the measure of the fourth angle?

A. 150^0 B. 160^0 C. 170^0 D. 180^0

2. What is the sum of the measures of the interior angles of a coin, which is in the shape of an octagon?

A. 880^0 B. 980^0 C. $1{,}080^0$ D. $1{,}180^0$

3. In Figure 1, $m\angle r$ = 140° and $m\angle s$ = 155°. Find $m\angle t$.

a. 25°
b. 40°
c. 65°
d. 90°

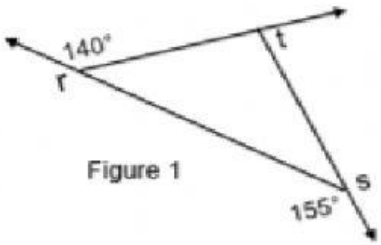


Figure 1

4. What is the measure of each interior angle of a regular dodecagon?

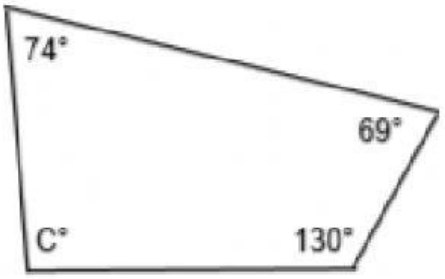
A. 120^0 B. 130^0 C. 140^0 D. 150^0

5. If the measure of each interior angle of a regular polygon is 108°, which of the following is the measure of its exterior angles?

A. 36^0 B. 72^0 C. 108^0 D. 144^0

6. In Figure 2, compute for C.

a. 87°
b. 88°
c. 89°
d. 90°



7.How many sides does the polygon have if the sum of each interior angles is 1,980°?

A. 11 B. 12 C. 13 D. 14

8. If three of the angles of a pentagon measure 108°, 132° and 90° respectively, which of the following is the measure of the remaining angles if they are equal?

A. 105^0 B. 110^0 C. 120^0 D. 125^0

9.If each interior angle of a regular polygon measures 120°, what is the total number of sides in the polygon?

A. 4 B. 6 C. 7 D. 8

10.Which of the following could NOT represent the measure of an exterior angle of a regular polygon?

A. 15^0 B. 27^0 C. 45^0 D. 72^0