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

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

Direction: Choose the letter of the correct answer.

1.If the measures of the first two angles of a triangle are 44° and 95° respectively, what is the measure of the third angle?
A. 21^0 B. 31^0 C. 41^0 D. 51^0

2. What is the sum of the measures of the interior angles of a tile, which is in the shape of a pentagon?
A. 540^0 B. 640^0 C. 740^0 D. 480^0

3. In Figure 1, $m\measuredangle m = 156°$ and $m\measuredangle n = 85°$. Find $m\measuredangle p$.

a. 24°
b. 95°
c. 119°
d. 241°

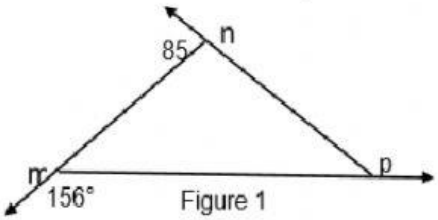

Figure 1

4. What is the measure of each interior angles of a regular decagon?
A. 144^0 B. 154^0 C. 164^0 D. 174^0

5.If the measure of each interior angles of a regular polygon is 120°, which of the following is the measure of each exterior angles?
A. 30^0 B. 40^0 C. 50^0 D. 60^0

6. In Figure 2, find the value of b.

a. 70°
b. 80°
c. 90°
d. 100°

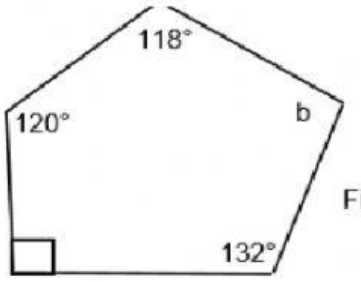

Figure 2

7.How many sides does the polygon have if the sum of each interior angle is 900º?

A. 5 B. 6 C. 7 D. 8

8. If four angles of a hexagon measure 72º, 157º, 85º, and 124º respectively, what is the measure of the remaining angles if they are congruent?

A. 121^0 B. 131^0 C. 141^0 D. 151^0

9. If each interior angle of a regular polygon measures 170º, how many sides does the polygon have?

A. 18 B. 24 C. 30 D. 30

10.If the sum of the measures of four exterior angles of a pentagon is 300º, what is the measure of the fifth exterior angle?

A. 30^0 B. 40^0 C. 50^0 D. 60^0