

GEOMETRY

Quiz # 4

Name: _____ Date: _____ Score: _____

I. MULTIPLE CHOICES: Encircle the letter of the best answer.

1. It is a segment or a ray that cuts an angle into two congruent angles.

- a. segment bisector c. angle bisector
b. line d. ray

2. Given that $\angle R \cong \angle A$. If $m\angle R = 98^\circ$ and $m\angle A = 2x + 6$, then what is the value of x ?

- a. 41 c. 46
b. 98 d. none of these

3. The vertex of $\angle GEO$ is located at the origin. Point G is located at (5, 0) and point O is located at (0, 7). How can $\angle GEO$ be classified?

- a. acute c. right
b. obtuse d. straight

4. In the figure below, if $m\angle BAC = 56^\circ$, what must be the measure of $\angle BAD$ in order for ray AC to be an angle bisector?

- a. 28°
b. 112°
c. 56°
d. 90°

5. What is the vertex of $\angle KFC$?

- a. K c. F
b. C d. X

II. Use the figure below to answer the following.

A. Name the vertex of each angle.

1. $\angle 2$ 2. $\angle 5$
3. $\angle ACF$ 4. $\angle KEC$

B. Name the sides of each angle.

1. $\angle 1$ 2. $\angle 3$
3. $\angle 4$ 4. $\angle KDC$

C. Write another name for each angle.

1. $\angle GCA$ 2. $\angle KEF$
3. $\angle HBI$ 4. $\angle HCF$

D. If ray BI bisects $\angle JBH$, and $m\angle JBI = 4x + 15$ and $m\angle HBI = 6x - 5$, then what is the $m\angle JBH$?

III. Classify each angle as RIGHT, ACUTE, or OBTUSE. Then use a protractor to measure the angle to the nearest degree.

1. $\angle UZW$
2. $\angle YZW$
3. $\angle TZW$
4. $\angle UZT$