

QUIZ 4

Plane Geometry

Sections 1.11–1.14
(–8 each)

COMPLETION: Write the correct answer in the blank at the left.

- scalene 1. A triangle with no two sides equal is ____.
- equiangular 2. A triangle with all three angles equal is ____.
- isosceles 3. A triangle with two sides equal is ____.
- seven 4. A polygon that has seven sides will have ____ interior angles.
- hypotenuse 5. The side opposite the right angle in a triangle is called the ____.
- legs 6. The perpendicular sides of a right triangle are called ____.
- regular 7. A polygon that is both equilateral and equiangular is called a(n) ____ polygon.
- ten 8. A twelve-sided polygon will contain ____ straight angles in the sum of its interior angles.
- nine 9. A regular polygon that has a central angle of 40° has ____ sides. Show your work.

$$\theta = \frac{360^\circ}{n}, 40^\circ = \frac{360^\circ}{n}, n = \frac{360^\circ}{40^\circ} = 9$$
- 144° 10. The measure of each interior angle of a ten-sided regular polygon is ____ degrees. Show your work.

$$\text{angle} = \frac{(n-2)180^\circ}{n} = \frac{(10-2)180^\circ}{10} = 144^\circ$$