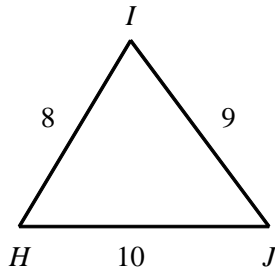
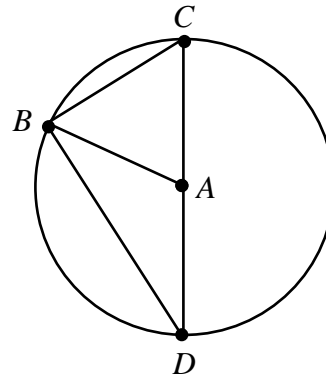


NAME: _____

1. Classify $\triangle HIJ$ as equilateral, isosceles, or scalene.



4.



Use the circle above. Classify $\triangle BAD$.

- [A] none of these [B] isosceles
[C] right [D] scalene

2. Classify the triangle with sides of length 8, 8, and 8.

- [A] straight [B] scalene
[C] isosceles [D] equilateral

3. A triangle has vertices $A(1, 1)$, $B(5, -1)$, and $C(0, -5)$. Classify the triangle by its sides. Use the Distance Formula to determine the longest side.

5. The lengths of the sides of a triangle are 14 m, 19 m, and 25 m. Is the triangle a right triangle, an acute triangle, or an obtuse triangle?

NAME: _____

6. Determine whether the numbers represent the lengths of the sides of an acute triangle, a right triangle, an obtuse triangle, or no triangle.

13, 15, 31

[A] acute triangle [B] obtuse triangle

[C] no triangle [D] right triangle

7. Classify the triangle with angles measuring 114° , 46° , and 20° .

[A] right [B] straight

[C] obtuse [D] acute

8. For each set of numbers, determine whether the numbers represent the lengths of the sides of an acute triangle, a right triangle, an obtuse triangle, or no triangle.

a. $\sqrt{75}$, $\sqrt{69}$, $\sqrt{7}$ b. 13, 15, 27 c.
7.8, 10.4, 13

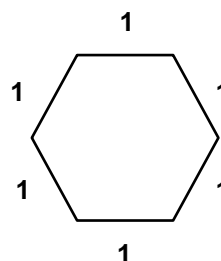
9. Graph a triangle with coordinates $A(-1, -2)$, $B(4, 2)$, and $C(6, -4)$.
Classify it as *right*, *obtuse*, or *acute*.

10. Which of the following *cannot* be the lengths of a 30° - 60° - 90° triangle?

[A] 11, 22, $11\sqrt{3}$ [B] $\frac{5}{2}$, 5, $\frac{5}{2}\sqrt{3}$

[C] 3, $\frac{3}{2}$, $3\sqrt{3}$ [D] $\frac{10}{3}$, $\frac{20}{3}$, $\frac{10}{3}\sqrt{3}$

11. Describe how to find the length of a segment joining the midpoints of opposite sides of a regular hexagon with sides 1 unit long.



[1] scalene

[2] D

[3] scalene; \overline{BC}

[4] B

[5] obtuse triangle

[6] C

[7] C

a. acute triangle, b. obtuse triangle, c. right

[8] triangle

[9] acute

[10] C

Draw the segment connecting two vertices.
The triangle formed by that segment, a side,
and the diagonal is a $30^\circ - 60^\circ - 90^\circ$ triangle.

[11] So, the length of the segment is $\sqrt{3}$.