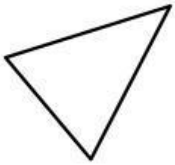
Name _____

Homework & Practice 14.4

Learning Target: Classify triangles by their angles.

Example Classify the triangle by its angles.

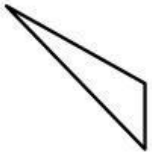


The triangle has three

__acute__ angles.

So, it is an __acute__ triangle.

Example Classify the triangle by its angles and its sides.



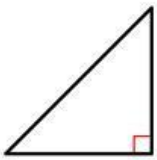
The triangle has one __obtuse__ angle and

__no__ sides with the same length.

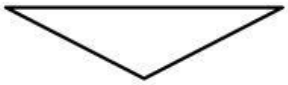
So, it is an __obtuse__ __scalene__ triangle.

Classify the triangle by its angles.

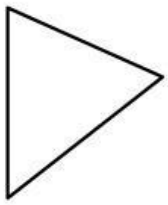
1.



2.

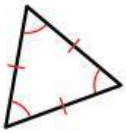


3.



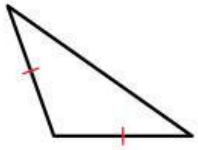
Classify the triangle by its angles and its sides.

4.



5.

6.

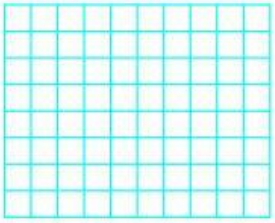


7.

8.

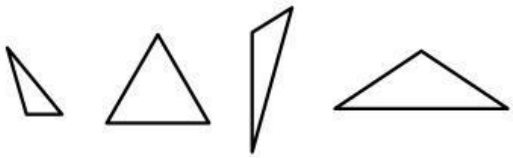
9.

10. **Precision** Draw a right isosceles triangle.

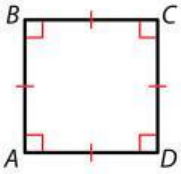


11. **Reasoning** Can a triangle have more than one right angle? Explain.

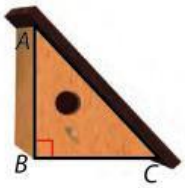
12. **Which One Doesn't Belong?** Which triangle does *not* belong with the other three?



13. **DIG DEEPER!** Draw $\overline{BD}$. Then classify each triangle by its angles and its sides.



14. **Modeling Real Life** Classify the face of the bird house by its angles. Verify your answer by finding the measure of each angle.



15. **Modeling Real Life** A construction worker measures a triangle formed by the supports on a bridge. The angle measures are 120°, 36°, and 24°. The side lengths are 12.65 meters, 8.61 meters, and 5.91 meters. Classify the triangle by its angles and its sides.

Review & Refresh

Add.

16. $2\frac{2}{6} + 4\frac{3}{6} =$ ____

17. $10\frac{1}{5} + 8\frac{4}{5} =$ ____

18. $3\frac{5}{10} + 6\frac{3}{10} + \frac{6}{10} =$ ____