

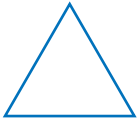


Homework 14-7

Triangles

Another Look!

Triangles can be classified by their angle measures, side lengths, or both!



Equilateral triangle
All sides are the same length.



Isosceles triangle
At least two sides are the same length.



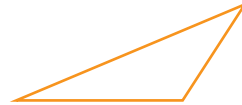
Scalene triangle
No sides are the same length.



Right triangle
One angle is a right angle.

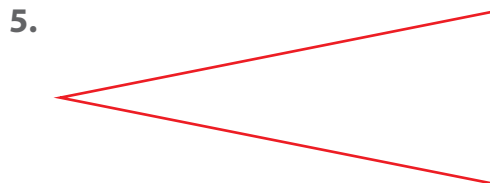
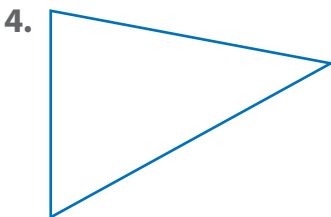
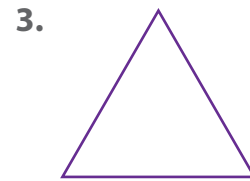
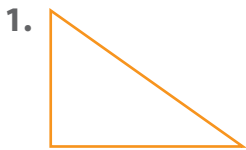


Acute triangle
All three angles are acute angles.



Obtuse triangle
One angle is an obtuse angle.

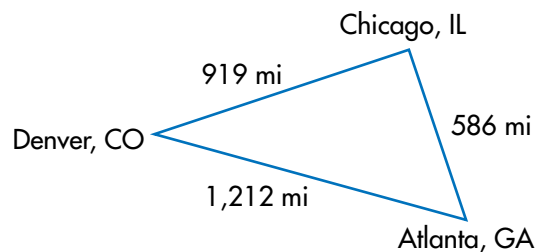
In **1** through **5**, classify each triangle by its sides and then by its angles.



You can use tools to help you classify shapes.



6. **Connect** Hilary flew from Denver, CO, to Atlanta, GA. Then she flew to Chicago, IL, on her way back home to Denver. Classify the triangle made by her complete flight path.



7. How many miles did the plane travel to complete the triangle?

8. **Construct Arguments** Sylvia says that a right triangle can have only one right angle. Joel says a right triangle could have more than one right angle. Who is correct? Explain.

9. Which is a triangle with one obtuse angle?
 A Equilateral triangle
 B Right triangle
 C Obtuse triangle
 D Acute triangle

10. **Draw a Picture** Ursula has 3 line segments that are the same length. What kind of triangle can she make? Sketch the triangle.

11. Todd drew an equilateral triangle. Which of the following describes the triangle he drew?
 A Obtuse
 B Acute
 C Scalene
 D Right

12. Norman drew a right triangle. Which triangle could he have drawn?



13. **Extend Your Thinking** Dani measured the angles of a triangle as 120° , 36° , and 24° . Then, she measured the side lengths as 25.3 cm, 17.2 cm, and 11.8 cm. She said that her triangle is an isosceles obtuse triangle. Do you agree? Explain.