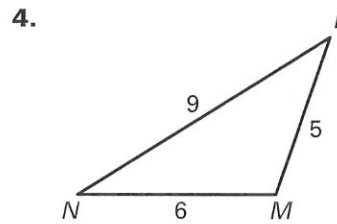
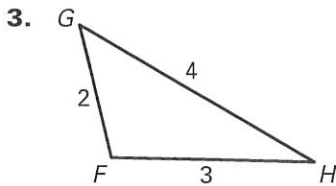
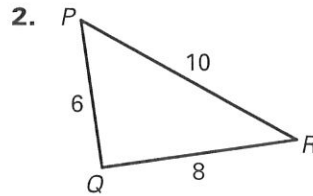
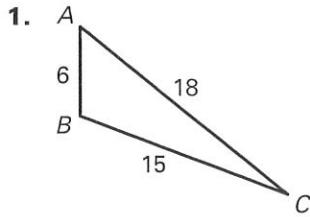


**LESSON**  
**5.5**

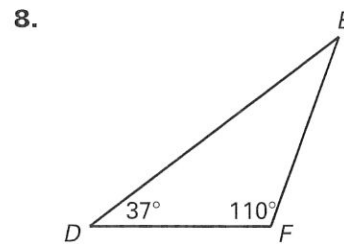
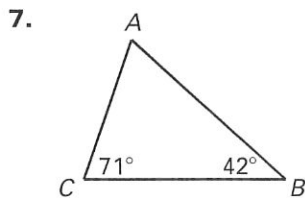
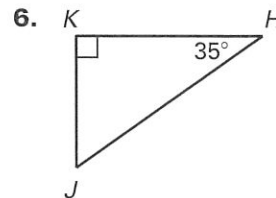
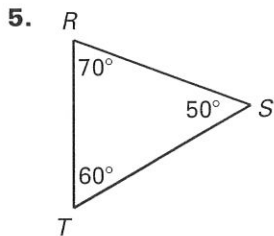
**Practice A**

For use with the lesson "Use Inequalities in a Triangle"

Name the smallest and largest angles of the triangle.



Name the shortest and longest sides of the triangle.



Use a ruler and protractor to draw the given type of triangle. Mark the largest angle and longest side in red and the smallest angle and shortest side in blue. What do you notice?

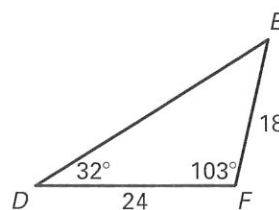
9. Obtuse scalene

10. Right scalene

For Exercises 11 and 12, use the following diagram.

11. Name the smallest and largest angles of  $\triangle DEF$ .

12. Name the shortest and longest sides of  $\triangle DEF$ .



LESSON  
5.5**Practice A** *continued*

For use with the lesson "Use Inequalities in a Triangle"

**Is it possible to construct a triangle with the given side lengths?****If not, explain why not.**

13. 6, 10, 15

14. 11, 16, 32

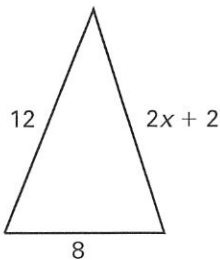
**Describe the possible lengths of the third side of the triangle given the lengths of the other two sides.**

15. 12 in., 6 in.

16. 3 ft, 8 ft

17. 12 cm, 17 cm

18. 7 yd, 13 yd

19. Describe the possible values of  $x$ .**In Exercises 20–22, you are given a 12-inch piece of wire. You want to bend the wire to form a triangle so that the length of each side is a whole number.**

20. Sketch two possible isosceles triangles and label each side length.

21. Sketch a possible scalene triangle.

22. List two combinations of segment lengths that will not produce triangles.

23. **Distance** Union Falls is 60 miles NE of Harnedville. Titus City is 40 miles SE of Harnedville. Is it possible that Union Falls and Titus City are less than 100 miles apart? *Justify* your answer.