Name _____ Class _____ Date _____

Practice 4-6

Example Exercises

Example 1

Is it possible for a triangle to have sides with the given lengths? Explain.

1. 3 cm, 4 cm, and 7 cm

2. 1 in., 2 in., and 2 in.

3. 7 m, 9 m, and 17 m

4. 11 yd, 12 yd, and 23 yd

5. 8 ft, 8 ft, and 8 ft

6. 3 cm, 5 cm, and 7 cm

7. 8 m, 15 m, and 27 m

8. 1 cm, 2 cm, and 3 cm

9. 13 m, 14 m, and 29 m

10. 1.5 ft, 2 ft, and 3.75 ft

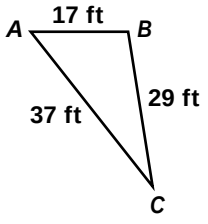
11. 5.9 yd, 6 yd, and 11 yd

12. $1\frac{1}{2}$ cm, 5 cm, and $6\frac{3}{4}$ cm

Example 2

Determine the two largest angles in each triangle.

13.



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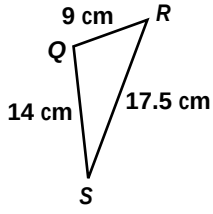

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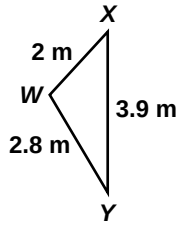

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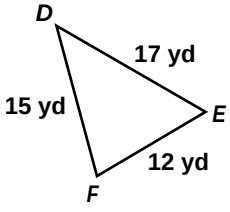

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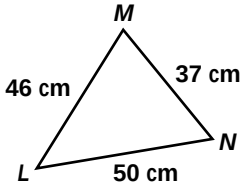

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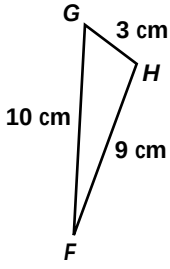
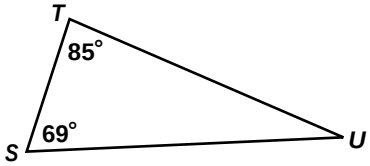


Example 3

In $\triangle STU$, which side is shortest?

19.



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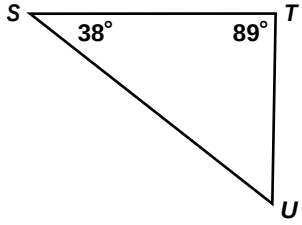

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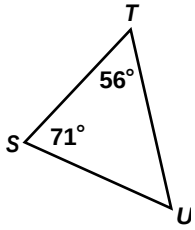

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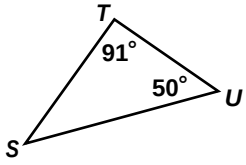

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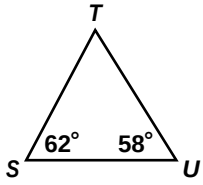

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