

Practice 4-6

Example Exercises

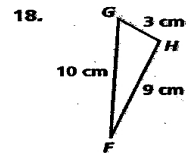
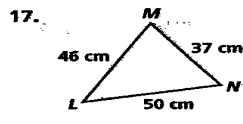
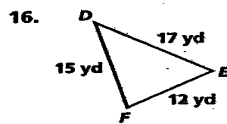
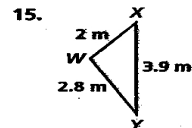
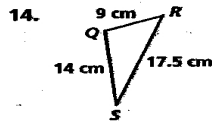
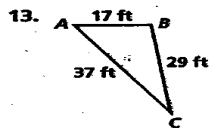
Example 1

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.



Example 3

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

