## Isosceles and Equilateral Triangles

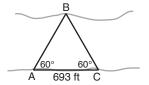
Name the parts of the figure that match the vocabulary words.

- 1. base: \_\_\_\_\_
- 2. legs: \_\_\_\_\_ and \_\_\_\_
- **3.** base angles: \_\_\_\_\_ and \_\_\_\_
- 4. vertex angle: \_\_\_\_\_



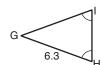
Fill in the blanks in Exercises 5–8 to complete each theorem.

- 5. If a triangle is equilateral, then it is \_\_\_\_\_\_.
- **6.** If two angles of a triangle are congruent, then the sides \_\_\_\_\_\_ those angles are congruent.
- **7.** If two sides of a triangle are congruent, then the \_\_\_\_\_ opposite those sides are congruent.
- 8. If a triangle is equiangular, then it is \_\_\_\_\_\_.
- **9.** A forest ranger in Grand Canyon National Park wants to find the minimum distance across the canyon. She finds a place in the Marble Canyon area of the park where the sides seem close together. She takes measurements and draws this figure. Find the distance *AB*. (*Hint:* The angles in an equiangular triangle measure 60°.)



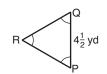
Find each value.





**10.** m∠*D* = \_\_\_\_\_





**12.** m∠*L* = \_\_\_\_\_





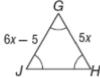
**14.**  $m \angle U =$ \_\_\_\_\_

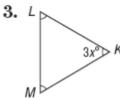
## Directions: Find the value of each variable.

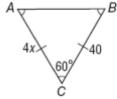
1.

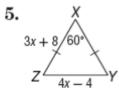


2.

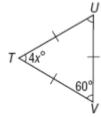




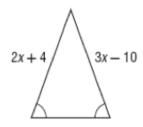




6.



7.



8.

