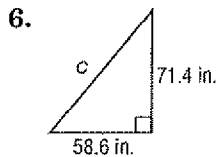
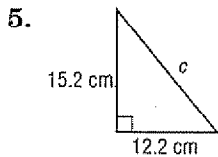
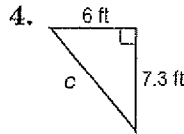
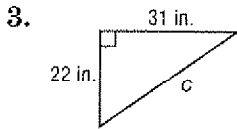
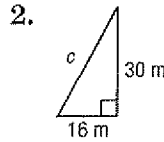
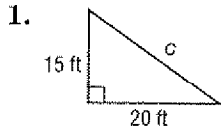


**10-4 Practice****The Pythagorean Theorem**

Find the length of the hypotenuse of each right triangle. Round to the nearest tenth, if necessary.



If  $c$  is the measure of the hypotenuse, find each missing measure. Round to the nearest tenth, if necessary.

- |                                           |                                           |
|-------------------------------------------|-------------------------------------------|
| 7. $a = ?$ , $b = 15$ , $c = 31$          | 8. $a = 8$ , $b = ?$ , $c = 16$           |
| 9. $a = 11$ , $b = 16$ , $c = ?$          | 10. $a = ?$ , $b = 13$ , $c = 19$         |
| 11. $a = 10$ , $b = ?$ , $c = 18$         | 12. $a = 21$ , $b = 23$ , $c = ?$         |
| 13. $a = ?$ , $b = 27$ , $c = 35$         | 14. $a = 48$ , $b = ?$ , $c = 61$         |
| 15. $a = 26$ , $b = \sqrt{596}$ , $c = ?$ | 16. $a = ?$ , $b = 12$ , $c = \sqrt{318}$ |

The lengths of three sides of a triangle are given. Determine whether each triangle is a right triangle.

17. 5 m, 5 m, 10 m                      18. 9 in., 12 in., 15 in.

19. **ARCHITECTURE** The diagonal distance covered by a flight of stairs is 21 ft. If the stairs cover 10 ft horizontally, how tall are they?

20. **KITES** A kite is flying at the end of a 300-foot string. It is 120 feet above the ground. About how far away horizontally is the person holding the string from the kite?