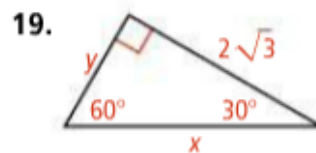
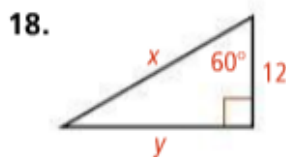
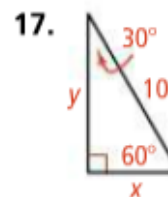
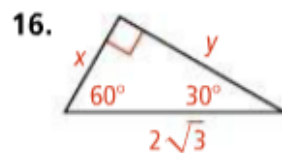
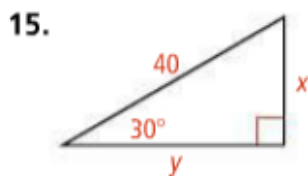


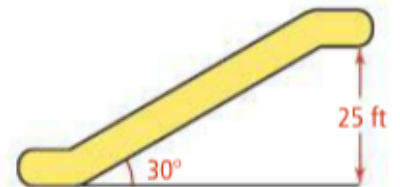
- 13. Dinnerware Design** What is the side length of the smallest square plate on which a 20-cm chopstick can fit along a diagonal without any overhang? Round your answer to the nearest tenth of a centimeter.
- 14. Aviation** The four blades of a helicopter meet at right angles and are all the same length. The distance between the tips of two adjacent blades is 36 ft. How long is each blade? Round your answer to the nearest tenth of a foot.

Algebra Find the value of each variable. If your answer is not an integer, express it in simplest radical form.

◀ See Problems 4 and 5.



- EM 21. Architecture** An escalator lifts people to the second floor of a building, 25 ft above the first floor. The escalator rises at a 30° angle. To the nearest foot, how far does a person travel from the bottom to the top of the escalator?



- EM 22. City Planning** Jefferson Park sits on one square city block 300 ft on each side. Sidewalks across the park join opposite corners. To the nearest foot, how long is each diagonal sidewalk?

Standardized Test Prep

- 34.** The longer leg of a 30°-60°-90° triangle is 6. What is the length of the hypotenuse?

(A) $2\sqrt{3}$ (B) $3\sqrt{2}$ (C) $4\sqrt{3}$ (D) 12

- 35.** Which triangle is NOT a right triangle?

