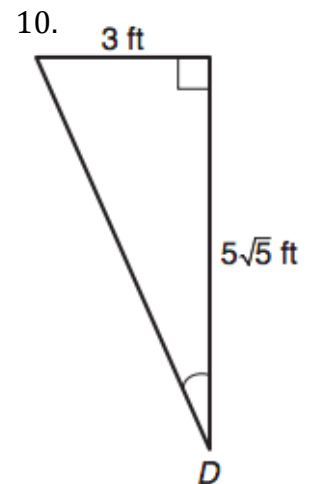
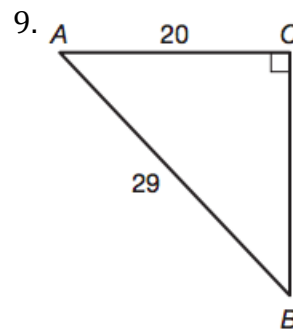
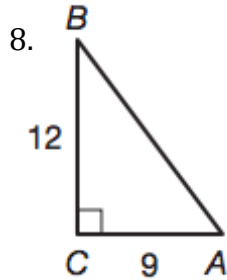
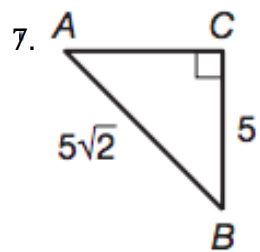
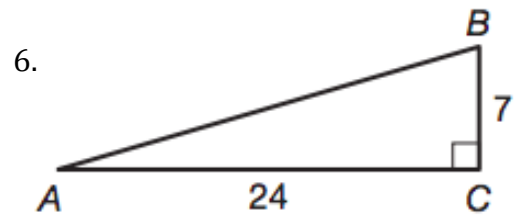
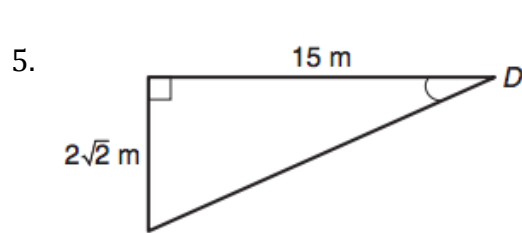
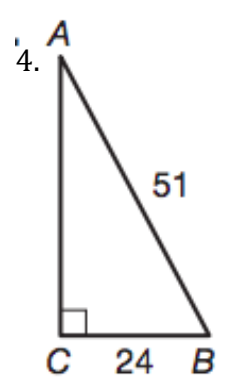
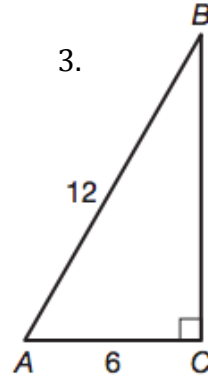
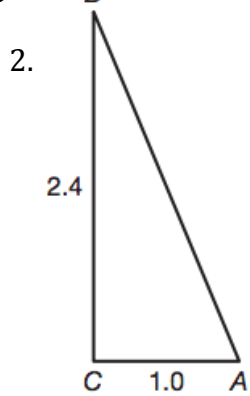
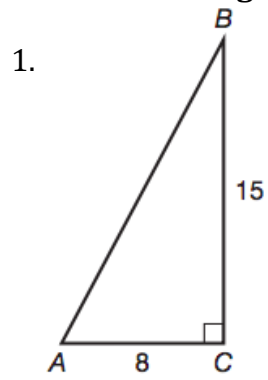
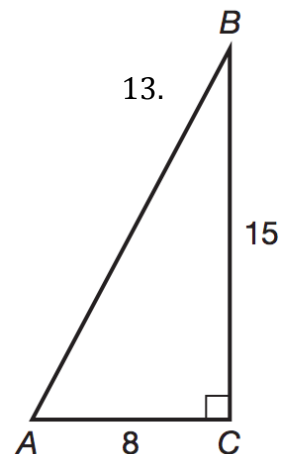
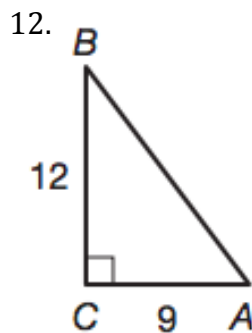
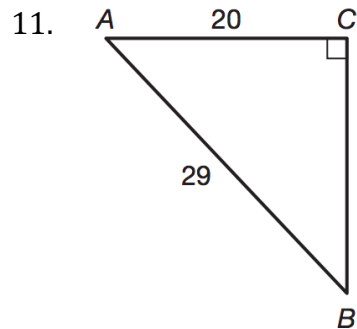


Find the missing side length:



Find all trigonometric functions for angle A in problems 11-13:



Draw a triangle and find all other trigonometric functions for problems 14-16:

14. $\sin q = \frac{4}{5}$

15. $\tan q = \frac{9}{12}$

16. $\cos q = \frac{1}{2}$

17. A standard baseball diamond is a square with 90 foot sides. How far must the first baseman be able to throw to get someone out on third base? Give answer to the nearest tenth of a foot.

18. You are painting a mural on a wall 18 feet high. So the ladder is stable, it must be placed 6 feet away from the wall. To the nearest foot, how tall must the ladder be?

Answer Key: (Red is Honors)

1. 17

3. $6\sqrt{3}$

5. $\sqrt{233}$

7. 5

9. 21

$$\sin A = \frac{21}{29}$$

$$\cos A = \frac{20}{29}$$

$$\tan A = \frac{21}{20}$$

11.

$$\csc A = \frac{29}{21}$$

$$\sec A = \frac{29}{20}$$

$$\cot A = \frac{20}{21}$$

$$\sin q = \frac{9}{15}$$

$$\cos q = \frac{12}{15}$$

15. $\csc q = \frac{15}{9}$

$$\sec q = \frac{15}{12}$$

$$\cot q = \frac{12}{9}$$

17. 127.3 ft