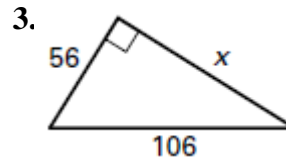
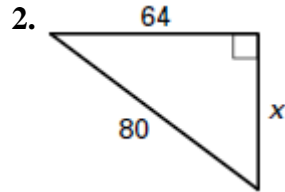
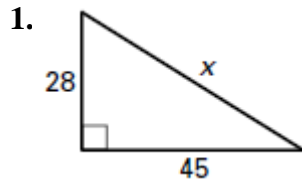


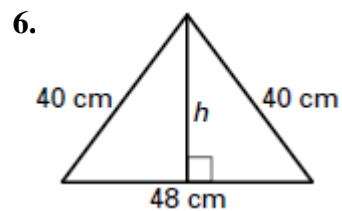
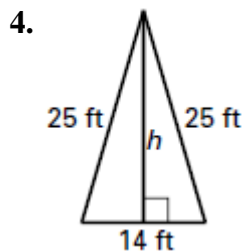
Geometry: Chapter 7 Test

For each problem, show all work and box all final answers. If necessary, round all answers to the nearest tenth.

Find the unknown side length x .



Find the area of the isosceles triangle.

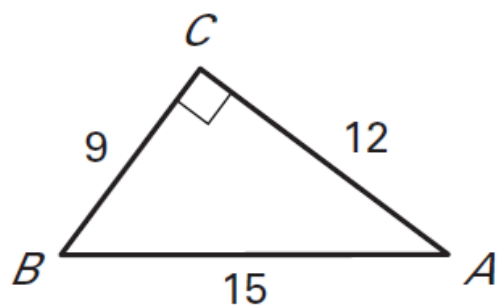


Use triangle ABC to find the following trigonometric ratios. Write your answer as a simplified fraction.

7. $\sin A$

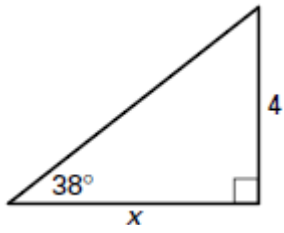
8. $\cos A$

9. $\tan A$

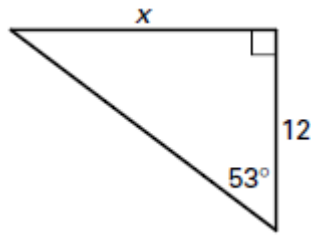


Find the value of x to the nearest tenth.

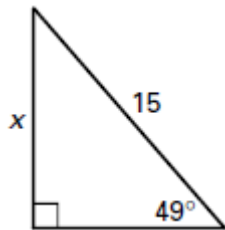
10.



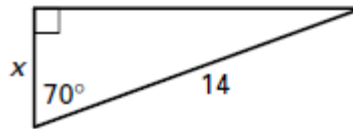
11.



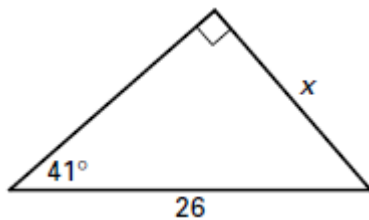
12.



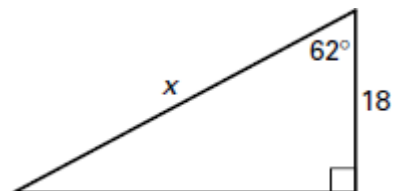
13.



14.

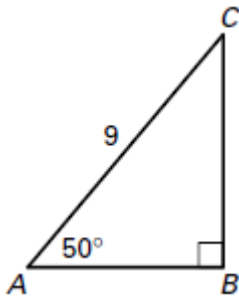


15.

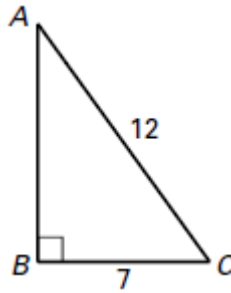


Solve for the missing sides or side in each triangle. Round to the nearest tenth.

16.

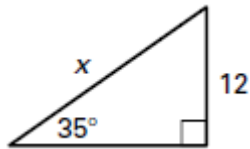


17.



18. Standardized Test Practice

Which expression could be used to find the value of x in the diagram?



- (A) $\cos 55^\circ = \frac{12}{x}$ (B) $\cos 35^\circ = \frac{x}{12}$
(C) $\cos 35^\circ = \frac{12}{x}$ (D) $\cos 55^\circ = \frac{x}{12}$

19. You are standing 100 ft. from the base of a water tower. The angle of elevation to the top of the water tower is 55° . How tall is the water tower?

20. A 45-foot ladder makes an angle of measure 55° with the ground. How high up the wall does the ladder reach?