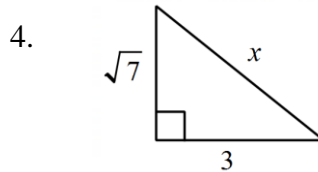
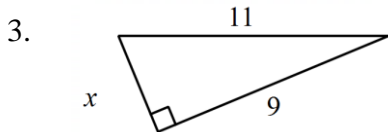
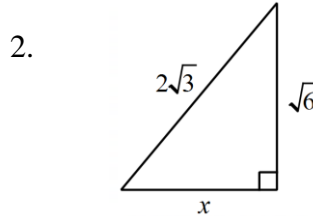
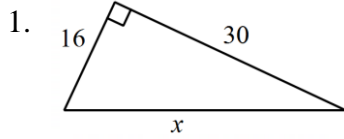


Name: \_\_\_\_\_ Period: \_\_\_\_\_

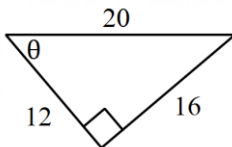
### Unit 11 Test Review on Trigonometry

Find the length of the missing side of each triangle. Leave you answers in the simplest radical form (simplified roots or “prison story”).

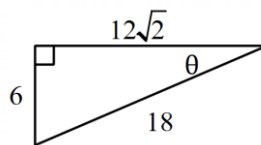


Find the value of the requested trigonometric function. Write exact answers (simplified fractions with simplified roots).

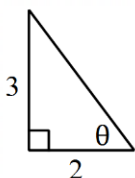
5.  $\tan \theta$



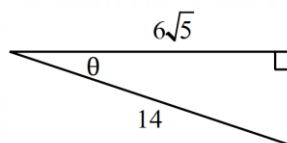
6.  $\sin \theta$



7.  $\cos \theta$

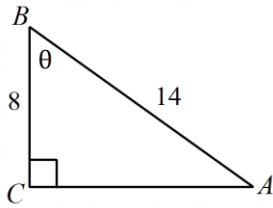


8.  $\sin \theta$

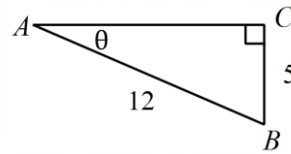


Find the measure of each angle indicated. Round your answers to the nearest tenth of a degree.

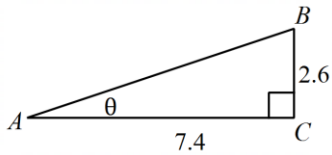
9.



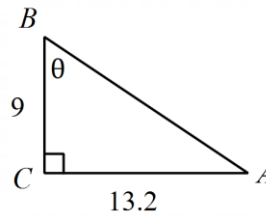
10.



11.

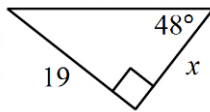


12.

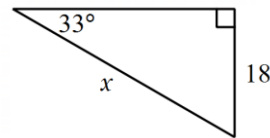


Write an equation involving sine, cosine, or tangent that can be used to find the missing side length. Then solve the equation. Round your answers to the nearest tenth.

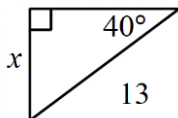
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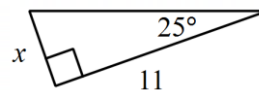
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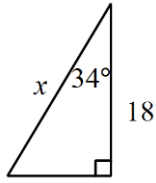
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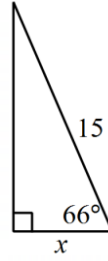
16.



17.



18.



Draw a diagram to help you solve each problem. Define a variable. Then write an equation and give your answers to the nearest tenth. Don't forget to include the correct units.

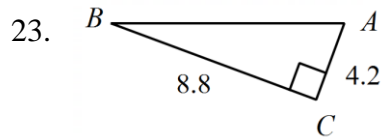
19. A 20-ft. ladder is leaning against a building. It makes a  $65^\circ$  angle with the ground. How far up the building does the ladder reach?

20. A baseball diamond is a square with sides length of 90 ft. The catcher attempts to catch a runner stealing by throwing from home plate to second base. How long is the throw?

21. A photographer wishes to take a picture of a bird in a tree. She is 15 feet from the base of the tree and is shooting the picture at a  $50^\circ$  angle of elevation. How far is the camera from the bird?

22. The chairlift at a ski resort has a vertical rise of 3900 ft. If the length of the ride is 6350 ft., what is the angle of elevation of the lift?

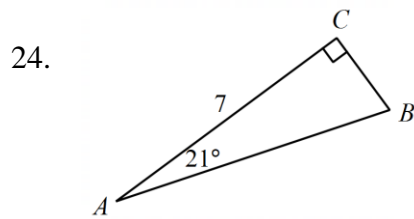
Solve each triangle. Remember to label all missing pieces and show all work. Round answers to the nearest tenth.



$m\angle A = \underline{\hspace{2cm}}$   $a = \underline{\hspace{2cm}}$

$m\angle B = \underline{\hspace{2cm}}$   $b = \underline{\hspace{2cm}}$

$m\angle C = \underline{\hspace{2cm}}$   $c = \underline{\hspace{2cm}}$



$m\angle A = \underline{\hspace{2cm}}$   $a = \underline{\hspace{2cm}}$

$m\angle B = \underline{\hspace{2cm}}$   $b = \underline{\hspace{2cm}}$

$m\angle C = \underline{\hspace{2cm}}$   $c = \underline{\hspace{2cm}}$

25.  $m\angle C = 90^\circ$ ,  $c = 10$ ,  $a = 2.8$

$m\angle A = \underline{\hspace{2cm}}$   $a = \underline{\hspace{2cm}}$

$m\angle B = \underline{\hspace{2cm}}$   $b = \underline{\hspace{2cm}}$

$m\angle C = \underline{\hspace{2cm}}$   $c = \underline{\hspace{2cm}}$