



**THIRD SPACE
LEARNING**

Trigonometry Check for Understanding

A 15 question retrieval quiz for
students in grades 9 to 12.

Grades 9 to 12

Questions

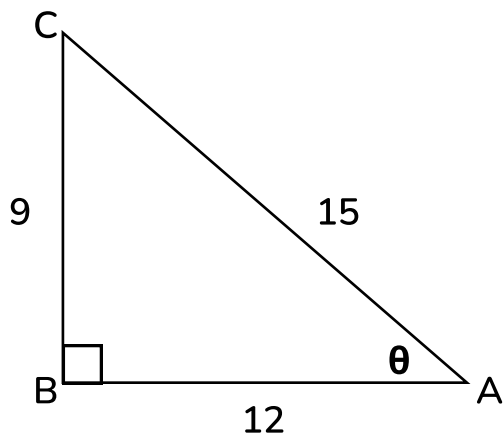
Name:

Class:

Date:

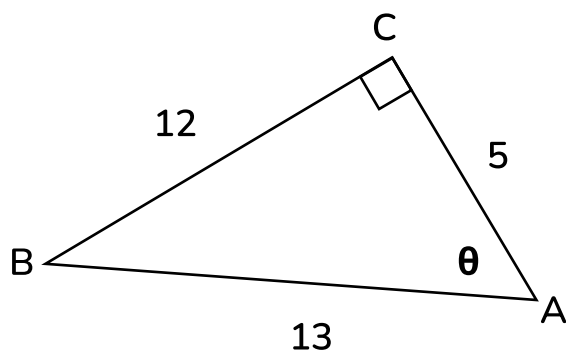
Score:

1 What is the $\cos \theta$?



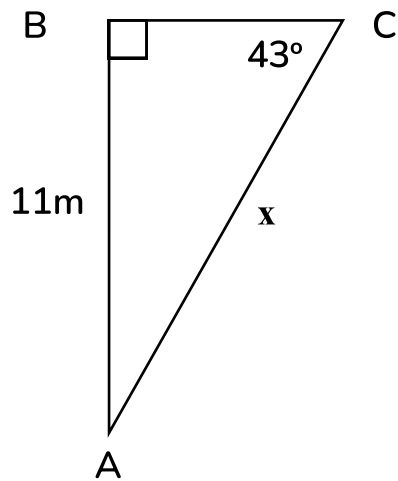
Answer

2 What is the $\tan \theta$?



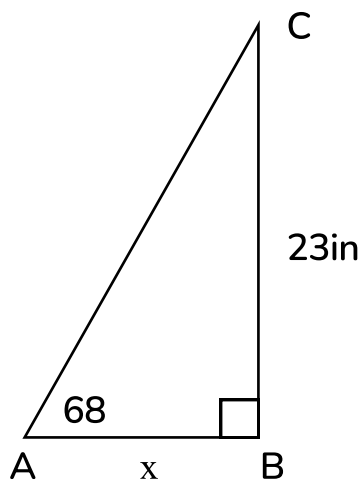
Answer

- 3 Solve for x (round the answer to the nearest hundredth of a meter).



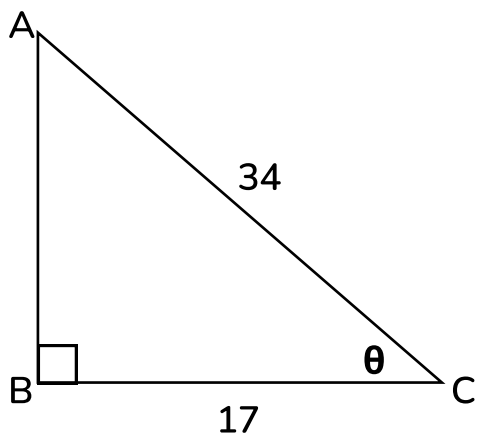
Answer

- 4 Solve for x (round the answer to the nearest hundredth of a inch).



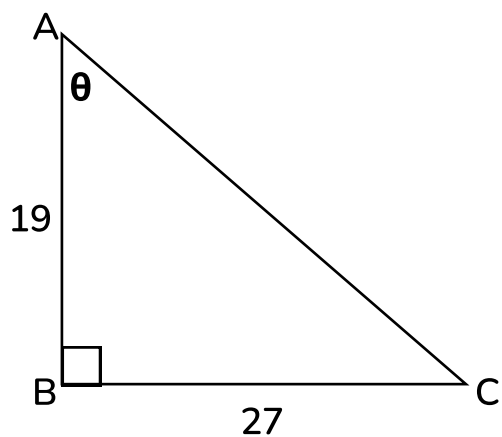
Answer

- 5 Find θ (round answer to the nearest whole degree).



Answer

- 6 Find θ (round answer to the nearest tenth of a degree).



Answer

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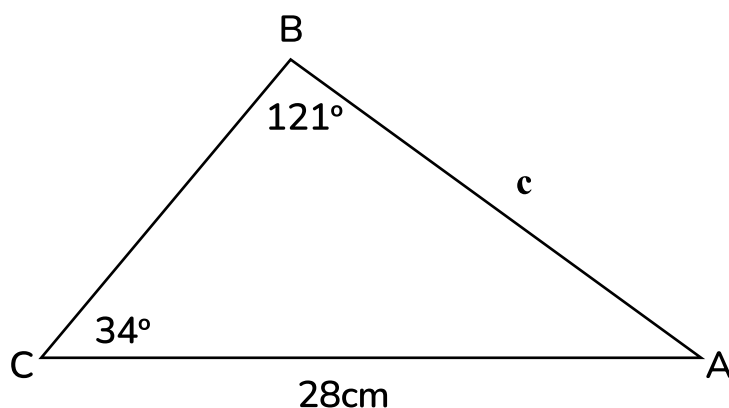
- 7 A 600 inch ladder leans against a building. The angle between the ladder and the ground is 62 degrees. How far is the bottom of the ladder from the building? Round the answer to the nearest tenth of an inch.

Answer

- 8 You are standing 57 meters away from a hot air balloon that is getting ready to take off. The angle of elevation to the top of the balloon is 22 degrees. Find the height of the balloon. Round the answer to the nearest whole centimeter.

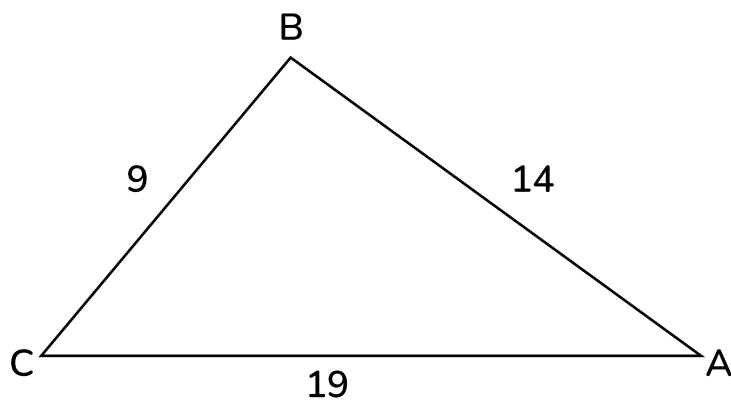
Answer

- 9 Find side c (round to the nearest hundredth of a cm).



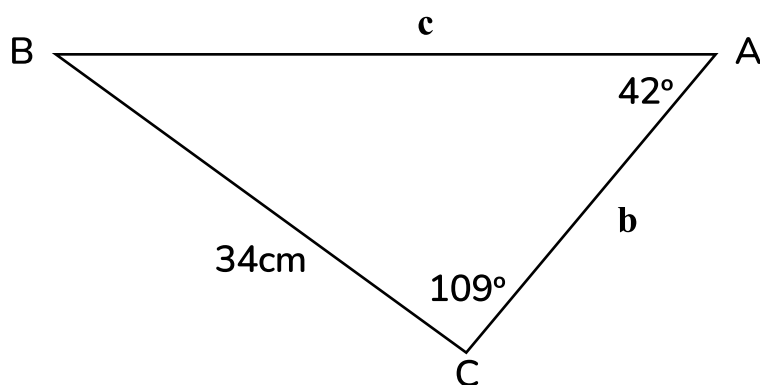
Answer

- 10 Find angle A. (Round the answer to the nearest whole degree).



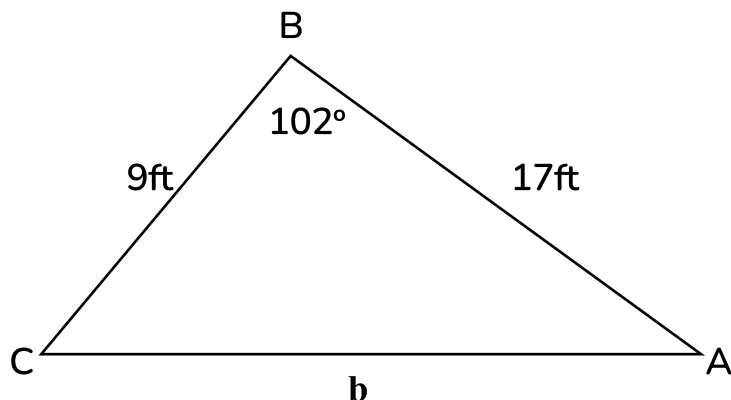
Answer

- 11 Find the side b, side c, and Angle B. (Round your answers to the nearest whole number).



Answer

- 12 Solve the triangle for the missing sides and the missing angles. (Round answers to the nearest tenth)

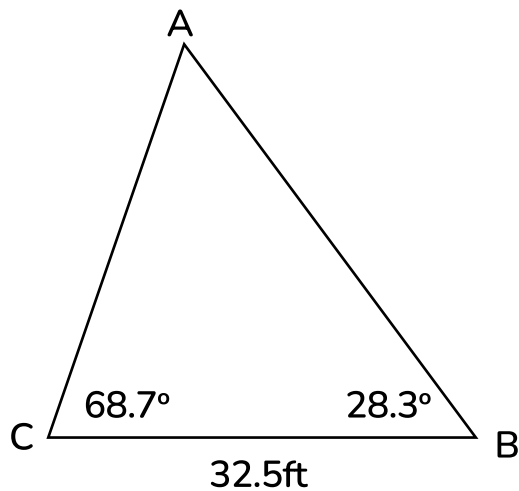


Answer

- 13 Polly has three sticks that measure 18 inches, 22 inches, and 28 inches. She forms a triangle out of the three sticks. Find the angle formed by the 18 inch stick and the 22 inch stick. Round the answer to the nearest tenth of a degree.

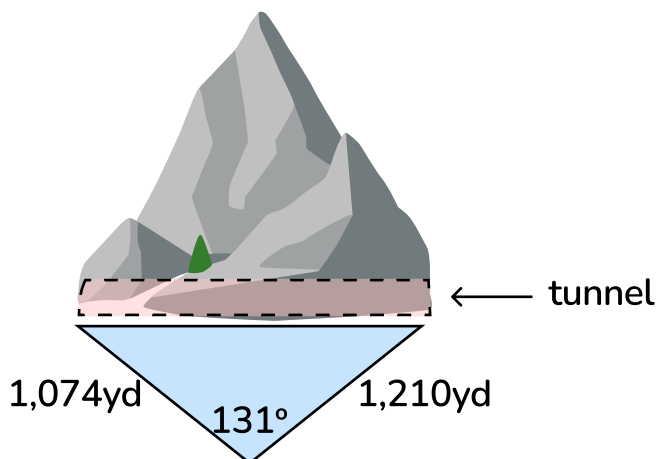
Answer

- 14 Find the area of the non-right triangle (round area to the nearest whole number).



Answer

- 15 A construction firm was contracted to build a tunnel through a mountain. In order to find the length of the tunnel, the measurements shown were taken. How long will the tunnel be? (Round answer to the nearest whole yard).



Answer

Answers

Question number	Question	Answers	Standard
1	What is the $\cos \theta$?	$\cos \theta = \frac{12}{15}$ or $\frac{4}{5}$	HSG-SRT.C.6
2	What is the $\tan \theta$?	$\tan \theta = \frac{12}{5}$	HSG-SRT.C.6
3	Solve for x (round the answer to the nearest hundredth of a meter).	$x = 16.13$ m	HSG-SRT.C.8 HSG-SRT.B.5
4	Solve for x (round answer to the nearest hundredth of an inch).	$x = 9.29$ in	HSG-SRT.C.8 HSG-SRT.B.5
5	Find θ (round answer to the nearest whole degree).	$\theta = 60^\circ$	HSG-SRT.C.8 HSG-SRT.B.5
6	Find θ (round to the nearest tenth of a degree).	$\theta = 54.9^\circ$	HSG-SRT.C.8 HSG-SRT.B.5
7	A 600 inch ladder leans against a building. The angle between the ladder and the ground is 62 degrees. How far is the bottom of the ladder from the building? Round the answer to the nearest tenth of an inch.	281.7 inches	HSG-SRT.C.8 HSG-SRT.B.5

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Question number	Question	Answers	Standard
8	You are standing 57 meters away from a hot air balloon that is getting ready to take off. The angle of elevation to the top of the balloon is 22 degrees. Find the height of the balloon. Round the answer to the nearest whole centimeter.	23 meters	HSG-SRT.C.8 HSG-SRT.B.5
9	Find side c (round to the nearest hundredth of a cm).	c = 18. 27 cm	HSG-SRT.D.10 HSG-SRT.D.11
10	Find angle A. (Round the answer to the nearest whole degree).	Angle A=27°	HSG-SRT.D.10 HSG-SRT.D.11
11	Find the side b , side c , and Angle B. (Round your answers to the nearest whole number).	side b = 25cm side c = 48 cm Angle B = 29°	HSG-SRT.D.10 HSG-SRT.D.11
12	Solve the triangle for the missing sides and the missing angles. (Round answers to the nearest tenth)	b = 20.8 ft Angle A = 25° Angle C = 53°	HSG-SRT.D.10 HSG-SRT.D.11
13	Polly has three sticks that measure 18 inches, 22 inches, and 28 inches. She forms a triangle out of the three sticks. Find the angle formed by the 18 inch stick and the 22 inch stick. Round the answer to the nearest tenth of a degree.	The angle is 88. 3°	HSG-SRT.D.10 HSG-SRT.D.11
14	Find the area of the non-right triangle (round area to the nearest whole number).	Area = 235ft ²	HSG-SRT.D.9

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Question number	Question	Answers	Standard
15	A construction firm was contracted to build a tunnel through a mountain. In order to find the length of the tunnel, the measurements shown were taken. How long will the tunnel be? (Round answer to the nearest whole yard).	The tunnel is 2,079 yards.	HSG-SRT.D.10 HSG-SRT.D.11

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