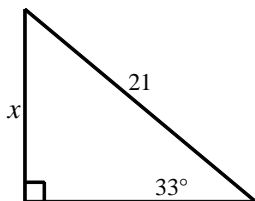


NAME: _____

P.I. A.A.44: Find the measure of a side of a right triangle, given an acute angle and the length of another side

1. What is x to the nearest hundredth?

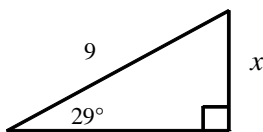


- [A] $x = 11.44$ [B] $x = 13.64$
[C] $x = 17.61$ [D] $x = 32.34$

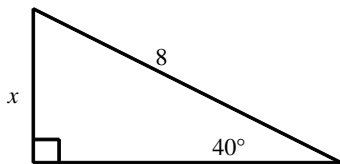
2. In $\triangle ABC$, $\angle A$ is a right angle and $m\angle B = 45$. If $AB = 17$ feet, find AC .

- [A] 14.722 ft [B] 29.445 ft
[C] 17 ft [D] 24.042 ft

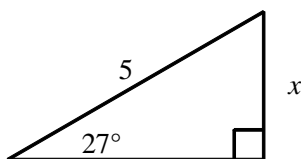
3. Use a table or calculator to find x .



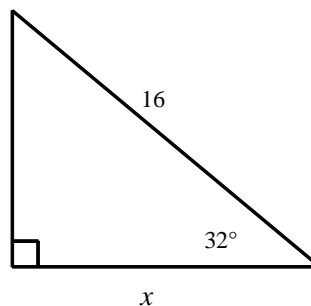
4. Find x to the nearest hundredth.



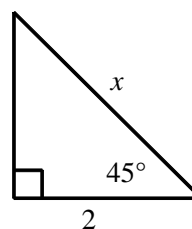
5. Find x .



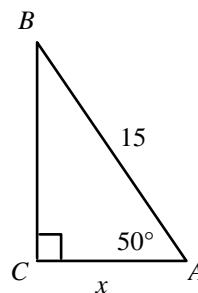
6. Find x , to the nearest hundredth.



7. Solve for x .



8. Use a calculator to find the value of x in the triangle shown.



9. In a 30° - 60° - 90° triangle, the length of the side opposite the 30° angle is 11 ft. Find the length of the side opposite the 60° angle, and the length of the hypotenuse.
10. The length of the hypotenuse of a 30° - 60° - 90° triangle is 11 m. Find the length of the side opposite the 30° angle.
11. Solve the right triangle given that $A = 15^\circ$, $C = 90^\circ$, and $a = 14$ m.

[1] A

[2] C

[3] 4.3633

[4] 5.14

[5] 2.27

[6] 13.57

[7] $2\sqrt{2}$

[8] about 9.6

[9] $11\sqrt{3}$ ft, 22 ft

[10] 5.5 m

$$B = 75^\circ$$

$$b = 52.25 \text{ m}$$

[11] $c = 54.09 \text{ m}$