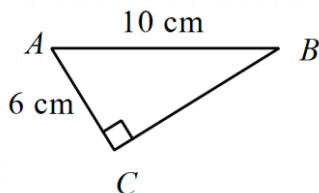


Name _____ Date _____ Period _____

Using trigonometric ratios and Pythagorean Theorem, find the missing measures.

Round to the nearest hundredth.

1.

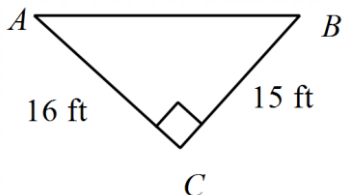


$m\angle A = \underline{\hspace{2cm}}$

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

$a = \underline{\hspace{2cm}}$

2.

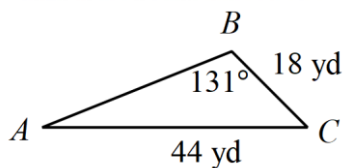
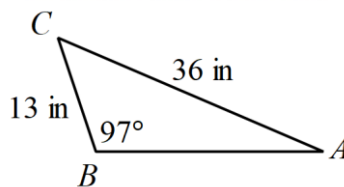
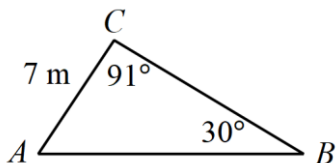
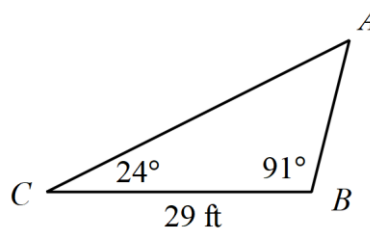


$m\angle A = \underline{\hspace{2cm}}$

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

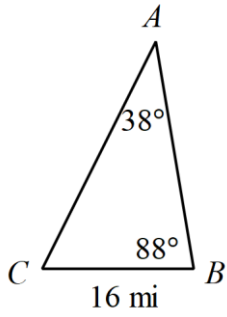
$c = \underline{\hspace{2cm}}$

Find each measurement indicated. Round your answers to the nearest tenth.

3. Find $m\angle A$.4. Find $m\angle A$.5. Find \overline{AB} .6. Find \overline{AB} .

Solve each triangle. Round your answer to the nearest tenth. Draw a diagram if needed.

7.

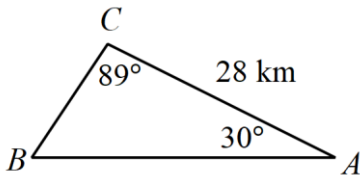


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

8.

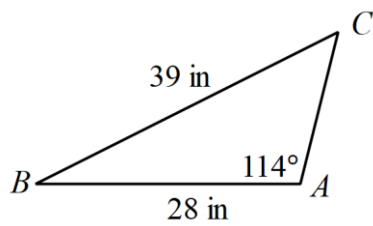


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

9.



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

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

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

10. $m\angle A = 113^\circ, c = 10 \text{ ft}, a = 21 \text{ ft}$

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

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

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

11. $m\angle C = 16^\circ, m\angle A = 139^\circ, c = 13 \text{ in}$

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

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

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

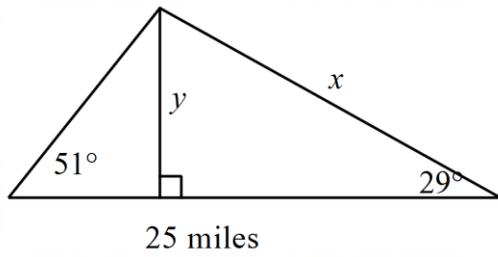
12. $m\angle C = 107^\circ, m\angle B = 52^\circ, a = 33 \text{ mi}$

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

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

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

13. Find the missing side lengths. Round to the nearest tenth.



Solve. Draw a diagram and show all your work. Round all answers to the nearest tenth if necessary.

14. To find the distance AB across a river, a distance BC of 1355 meters is laid off on one side of the river. It is found that $\angle B = 115.3^\circ$ and $\angle C = 17.1^\circ$. Find AB.

15. A wall leans towards the right, 4° from vertical. 25 feet from the wall still on the right side, the angle of elevation to the top is 34° . Find the length of the wall to the nearest tenth of a foot.