

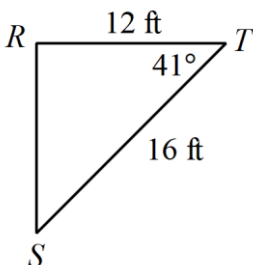
# 5.4

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

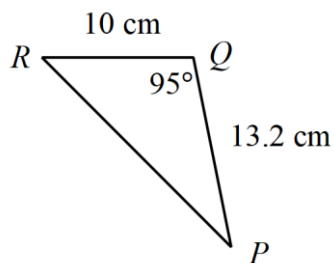
## Law of Sines

Find the area of each triangle to the nearest tenth.

1.

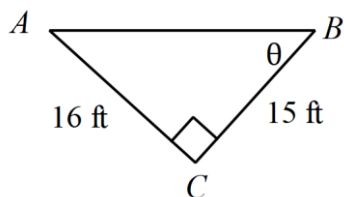


2.

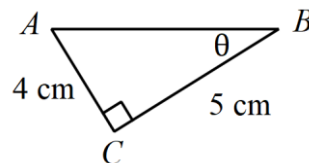


Using trigonometric ratios, find the measure of each angle indicated. Round to the nearest tenth.

3.

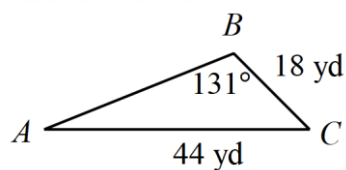


4.

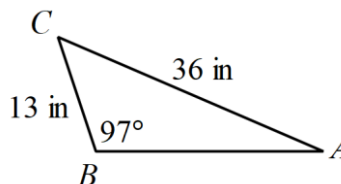


Find each measurement indicated. Round your answers to the nearest tenth.

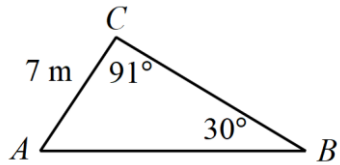
5. Find  $m\angle A$ .



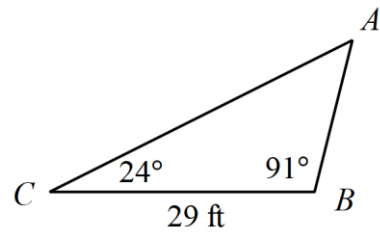
6. Find  $m\angle A$ .



7. Find  $\overline{AB}$ .

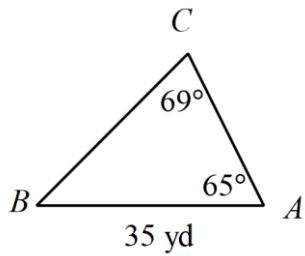


8. Find  $\overline{AB}$ .



Solve each triangle. Round your answers to the nearest tenth.

9.

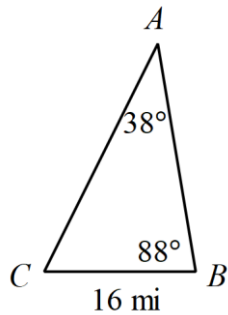


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

10.

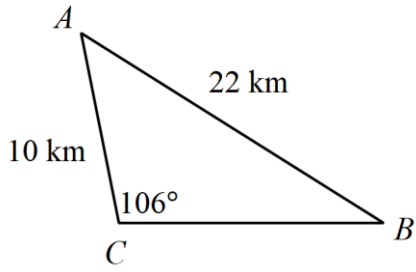


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

11.

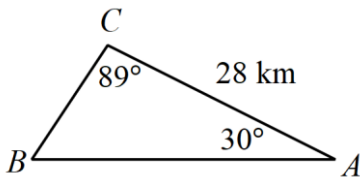


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

12.

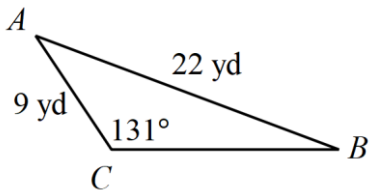


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

13.

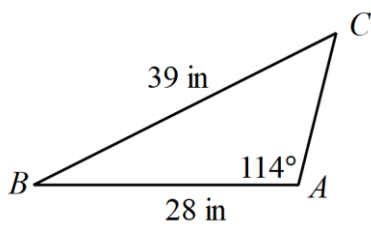


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

14.



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

18.  $m\angle A = 145^\circ, m\angle C = 13^\circ, c = 9 \text{ in}$

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

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

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