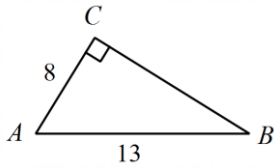


Name: \_\_\_\_\_ Period: \_\_\_\_\_

### SM2 11.5 Solve for a Right Triangle

For each triangle, label any missing sides with the appropriate letters. Solve the triangle. Round your answers to the nearest tenth. Show all your work!

1.

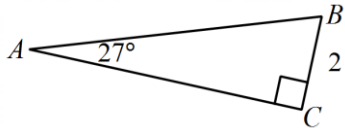


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

2.

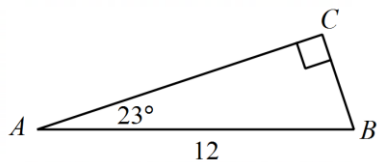


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

3.

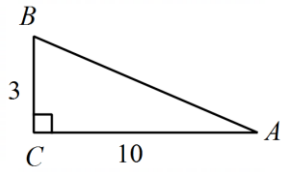


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

4.



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

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

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

**For each problem, use the given information to draw and label a triangle. Label all of the angles with the appropriate letters, put the measures you were given in the diagram at the correct places, and label any unknown sides with the correct letters. Solve the triangle. Round your answers to the nearest tenth. Show all your work!**

5.  $m\angle A = 44^\circ$ ,  $b = 10$

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

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

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

6.  $a = 14.7$ ,  $b = 11$

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

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

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

7.  $c = 9.5, a = 3$

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

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

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

8.  $m\angle B = 35^\circ, c = 6$

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

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

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