

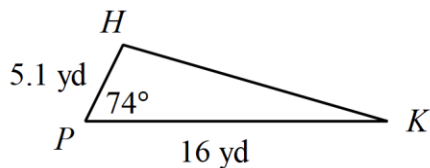
5.5

Name _____ Date _____ Period _____

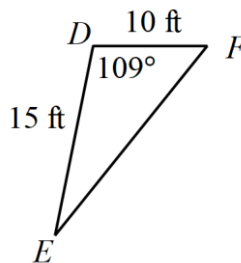
Law of Cosines

Find the area of each triangle to the nearest tenth.

1.

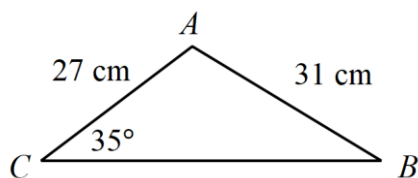


2.

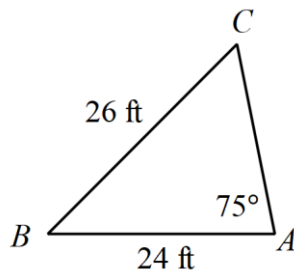


Find each measurement indicated, using the law of sines. Round your answers to the nearest tenth.

3. Find $m\angle B$.

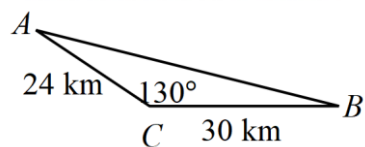


4. Find $m\angle C$.

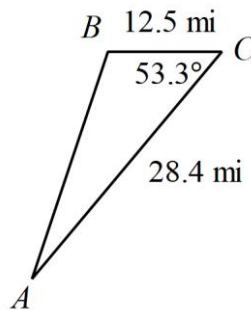


Find each measurement indicated. Round your answers to the nearest tenth.

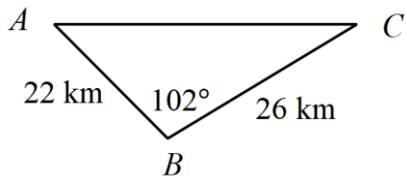
5. Find \overline{AB} .



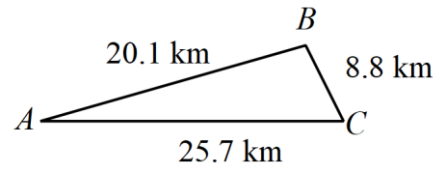
6. Find \overline{AB} .



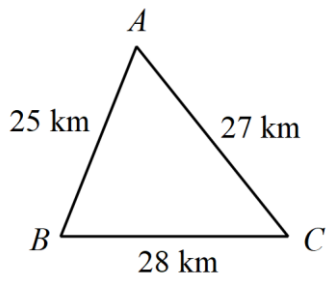
7. Find \overline{AC} .



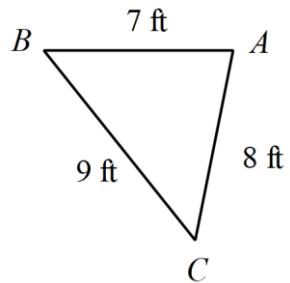
8. Find $m\angle B$.



9. Find $m\angle B$.

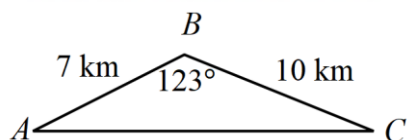


10. Find $m\angle A$.



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

11.

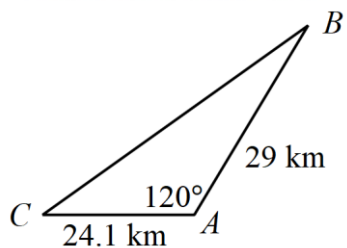


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

12.

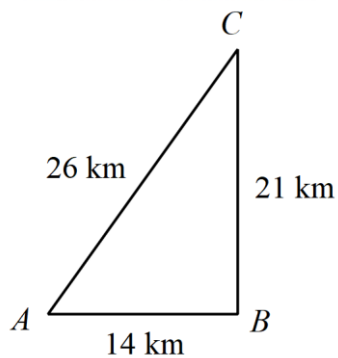


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

13.

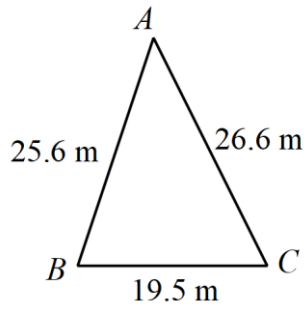


$$m\angle A = \underline{\hspace{2cm}} \quad a = \underline{\hspace{2cm}}$$

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

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

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. $m\angle C = 118^\circ, b = 18 \text{ km}, a = 17 \text{ km}$

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

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

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

16. $c = 9 \text{ km}, b = 6 \text{ km}, a = 14 \text{ km}$

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

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

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

Factor each completely.

17. $x^2 - 16x + 64$

18. $2b^2 - 16b + 30$