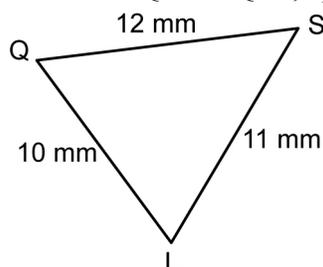


## Chapter 8 Practice Test

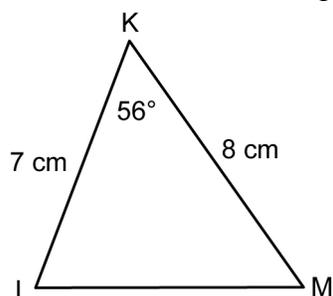
1. To find
- $\angle Q$
- in
- $\triangle QSL$
- , apply



- A the sine law  
 B the cosine law  
 C the tangent law  
 D the primary trigonometric ratios
2. The cosine law states that  
 A  $a^2 + b^2 = c^2$   
 B  $a^2 = b^2 + c^2 - 2bc\sin A$   
 C  $\frac{a}{\sin A} = \frac{b}{\sin B}$   
 D  $a^2 = b^2 + c^2 - 2bccosA$

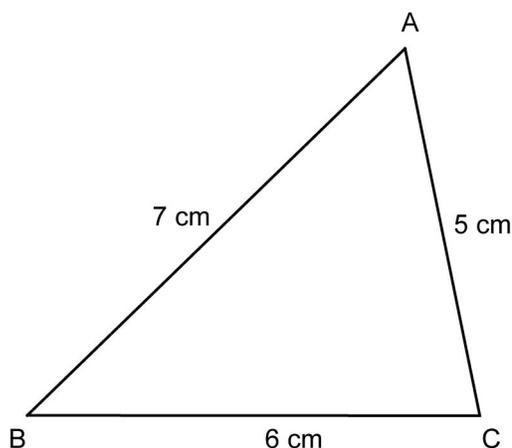
3. The angle of elevation is  
 A measured above a horizontal line  
 B measured below a horizontal line  
 C equal to  $90^\circ$   
 D equal to the angle of depression

4. To solve
- $\triangle KLM$
- , first apply

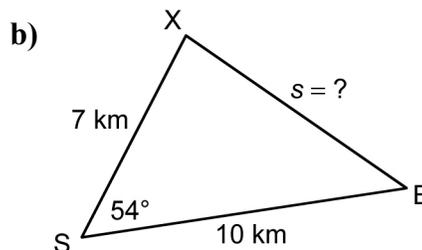
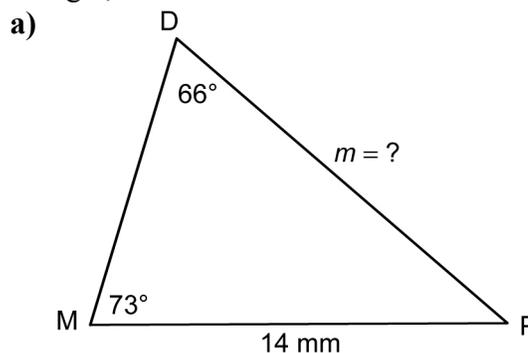


- A the primary trigonometric ratios  
 B the tangent law  
 C the cosine law  
 D the sine law

5. The smallest angle in
- $\triangle ABC$
- is



- A  $\angle A$   
 B  $\angle B$   
 C  $\angle C$   
 D impossible to determine
6. Find the length of the indicated side in each triangle, to the nearest tenth of a unit.



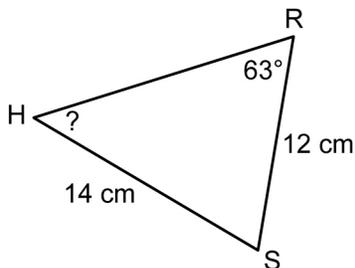
Name: \_\_\_\_\_

Date: \_\_\_\_\_

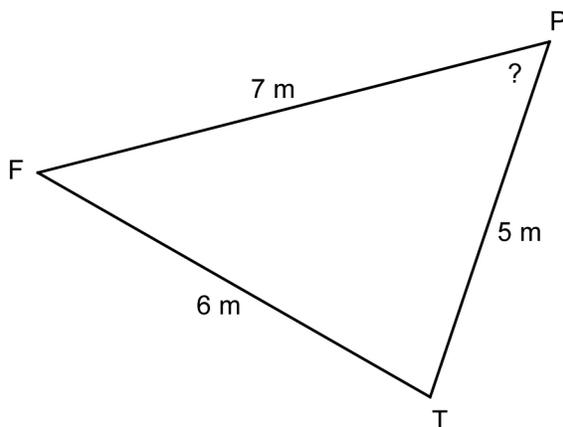
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7. Find the measure of the indicated angle in each triangle, to the nearest tenth of a degree.

a)



b)



8. **Use Technology** Check your answers to question 7 using dynamic geometry software.

9. Draw a diagram and label the given information. Then, solve each triangle. Round answers to the nearest unit.

a) In  $\triangle AFR$ ,  $\angle A = 67^\circ$ ,  $\angle F = 73^\circ$ , and  $a = 15$  cm.

b) In  $\triangle DLM$ ,  $\angle D = 62^\circ$ ,  $l = 8$  m, and  $m = 5$  m.

10. Use the measurements given in the diagram to find the height of the building, to the nearest metre.

