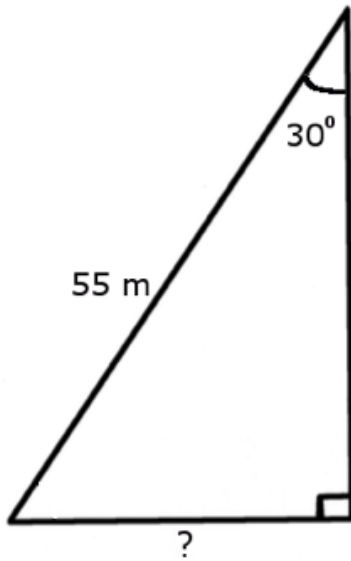
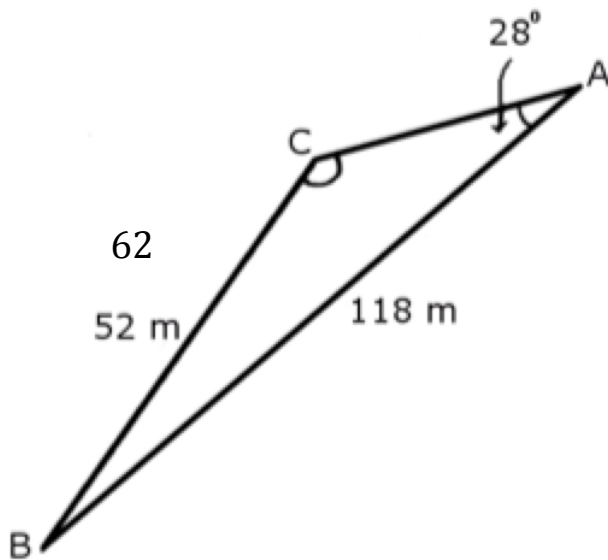


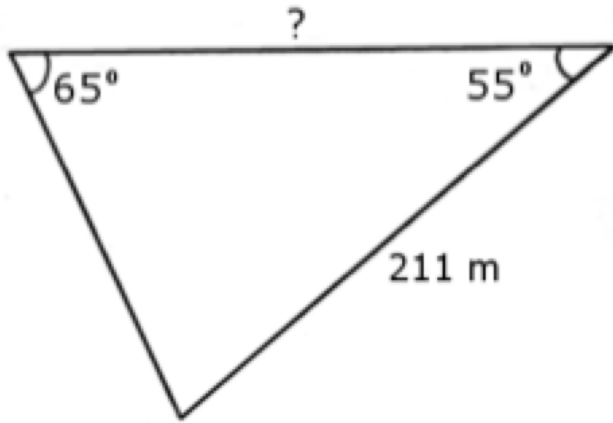
1.



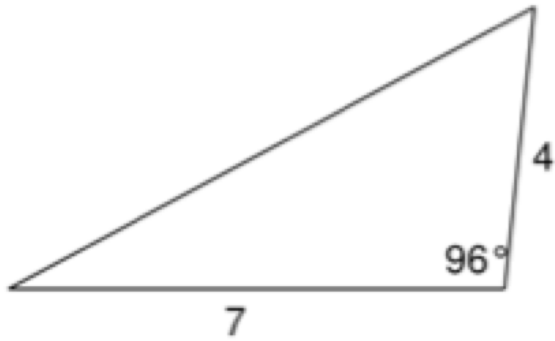
2. Solve for obtuse angle C



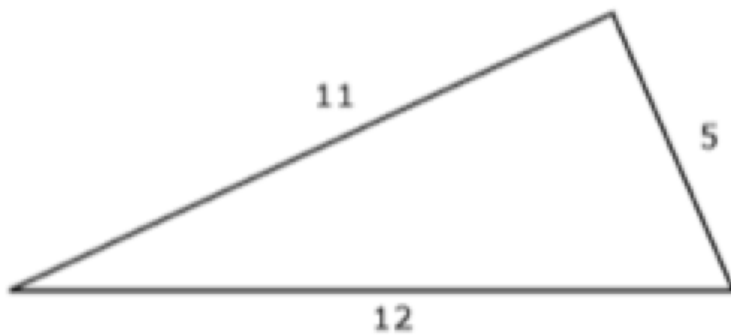
3.



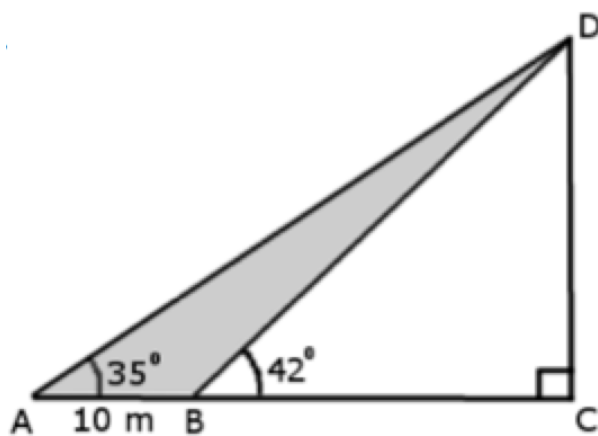
4. Find the area of the triangle



5. Find the area of the triangle



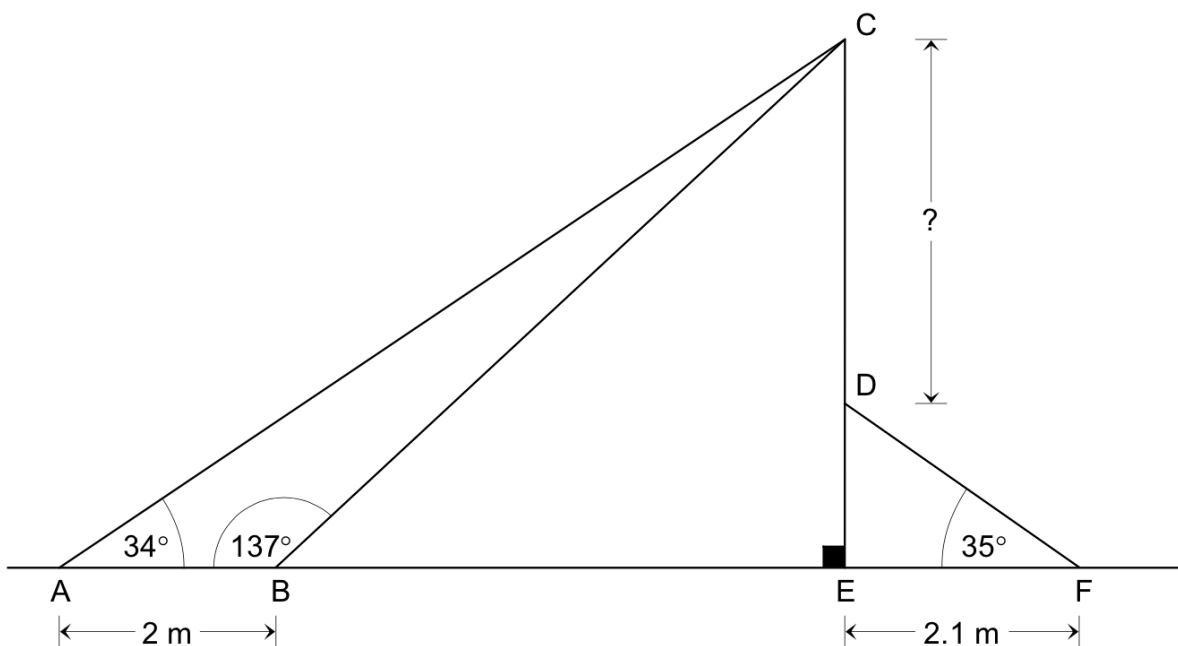
6. Find the area of the shaded triangle



7. A statue is secured to a base. Joan determined the measurements in the diagram below to find the height of the statue without the base.

In this diagram,

- ◆ line segment CD represents the statue
- ◆ line segment DE represents the base
- ◆ line AF represents the ground

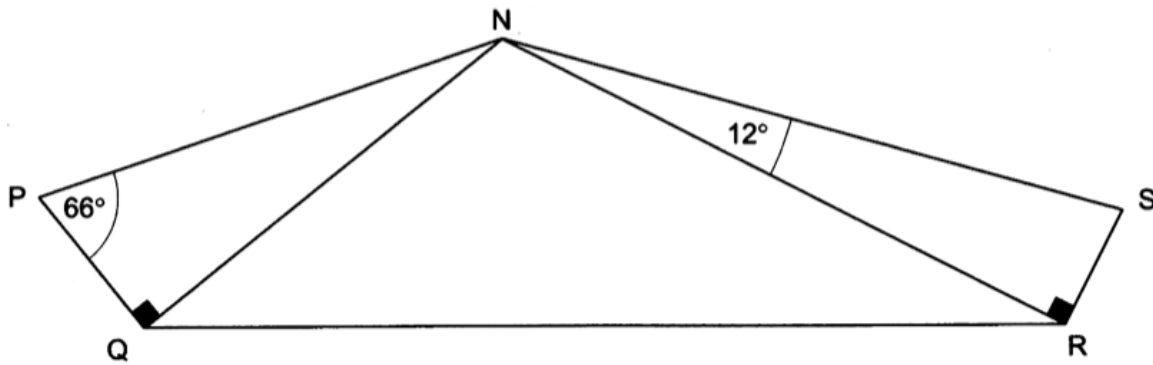


To the nearest tenth of a metre, what is the height of the statue without the base?

8. **AREA OF PENTAGON NPQRS**

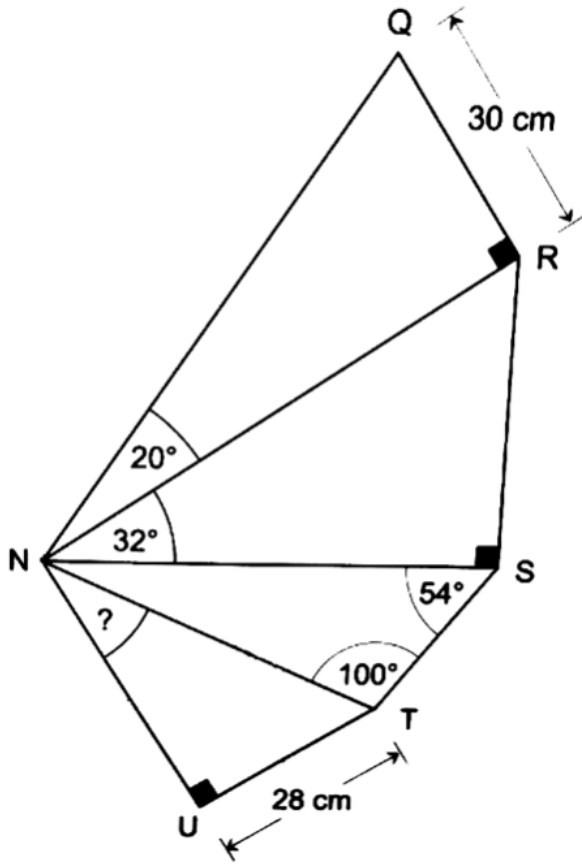
Diagonals  $\overline{NQ}$  and  $\overline{NR}$  were drawn in pentagon  $NPQRS$  represented below.

In addition,  
 $m\overline{NQ} = 40$  cm  
 $m\overline{NR} = 51$  cm  
 $m\overline{QR} = 77$  cm



To the nearest  $\text{cm}^2$ , what is the area of pentagon  $NPQRS$ ?

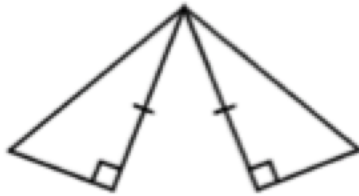
9.



10. Are the following sets of triangles isometric or not?

If so, state the isometric proof.

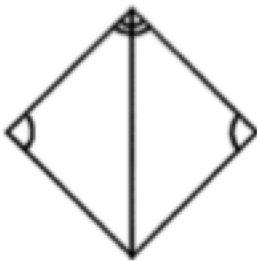
a)



Isometric \_\_\_\_\_.

Proof \_\_\_\_\_

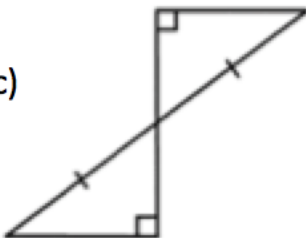
b)



Isometric \_\_\_\_\_.

Proof \_\_\_\_\_

c)



Isometric \_\_\_\_\_.

Proof \_\_\_\_\_

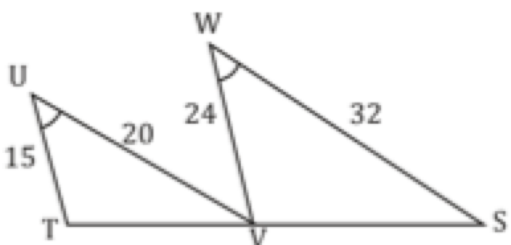
d)

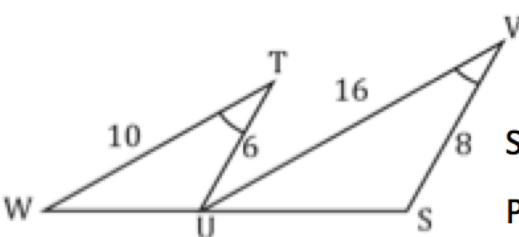


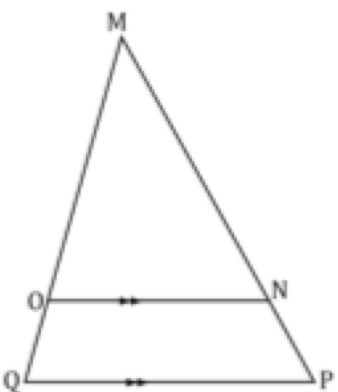
Isometric \_\_\_\_\_.

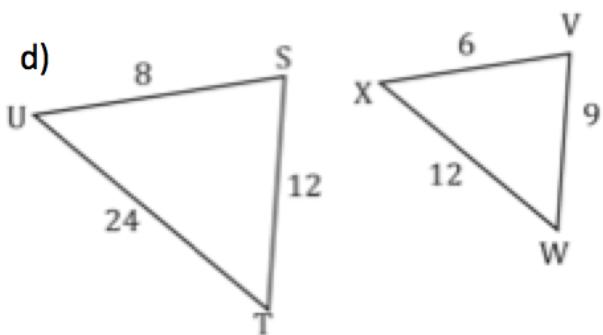
Proof \_\_\_\_\_

11. Are the following sets of triangles similar or not?  
If so, state the similarity proof.

a)  Similar \_\_\_\_\_.  
Proof \_\_\_\_\_

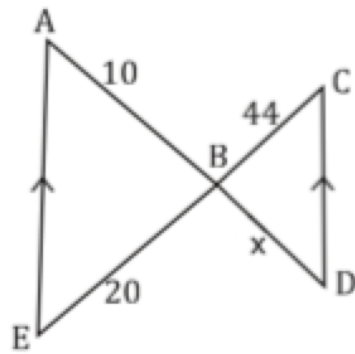
b)  Similar \_\_\_\_\_.  
Proof \_\_\_\_\_

c)  Similar \_\_\_\_\_.  
Proof \_\_\_\_\_

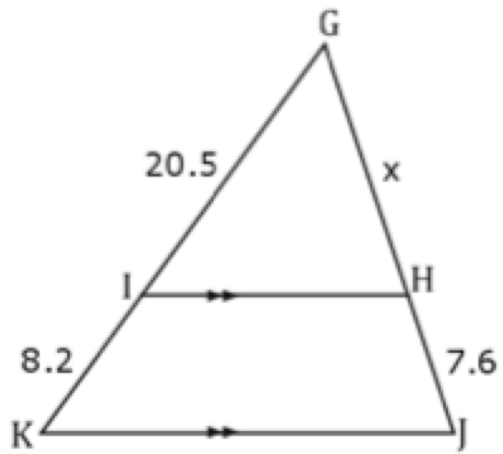
d)  Similar \_\_\_\_\_.  
Proof \_\_\_\_\_



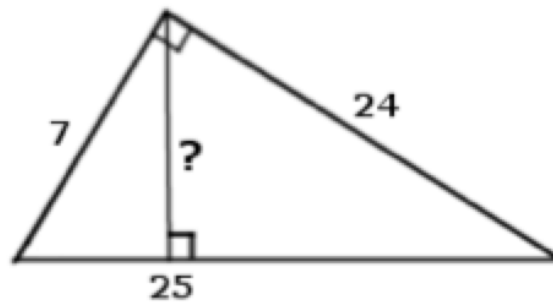
12. Find the missing value of 'x'.



13. Find the missing value of 'x'.



14. Find the value of '?'  
Show all work and include all formulas.



15. Find the height of triangle below.

