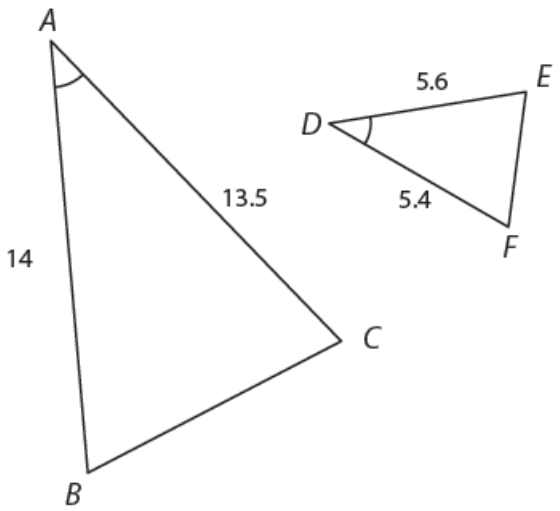
Secondary 2H **Name**_____ **Desk** _____

Unit 8 **Proving Similarity**

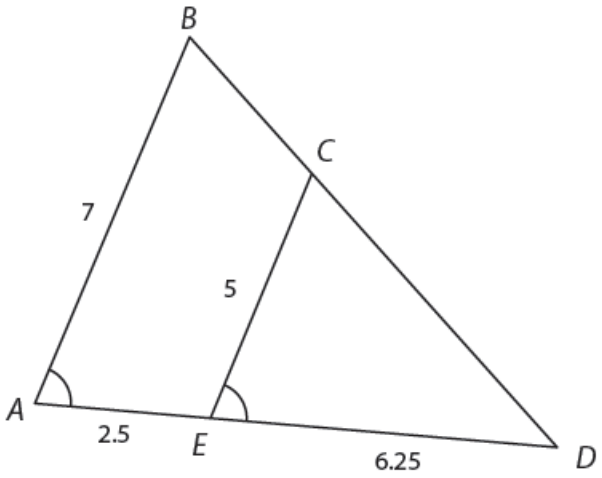
Score _____

1. Prove that the triangles are similar.

a.

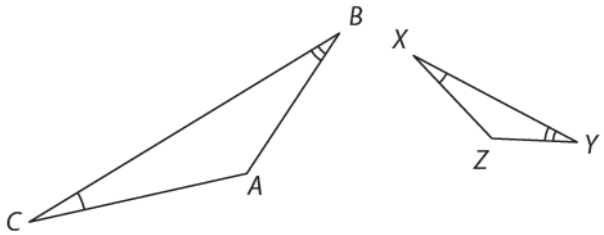


b.

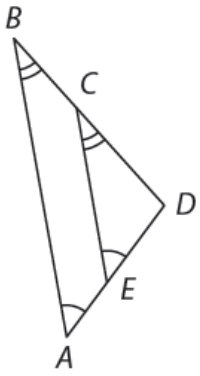


2. Determine whether the triangles are similar. If the triangles are similar, identify the similarity statement that proves they are similar, and write a similarity statement.

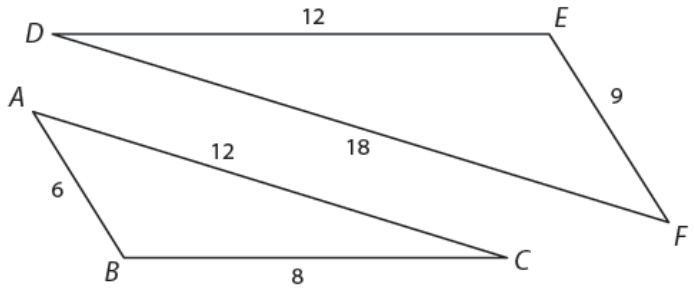
a.



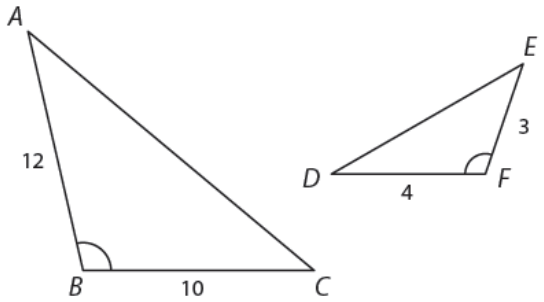
b.



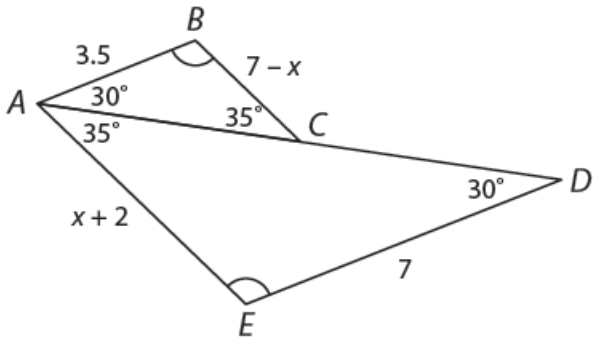
c.



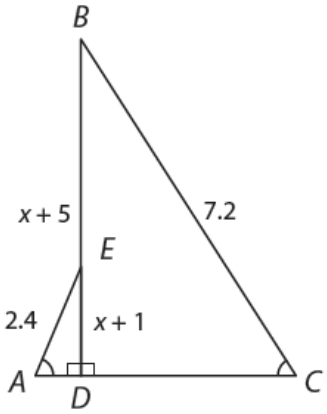
d.



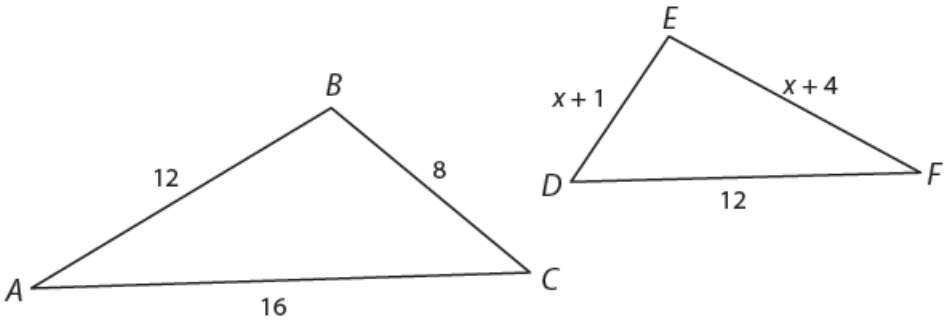
3. Identify the similar triangles and the statement that justifies their similarity. Find x and the measures of the indicated sides.



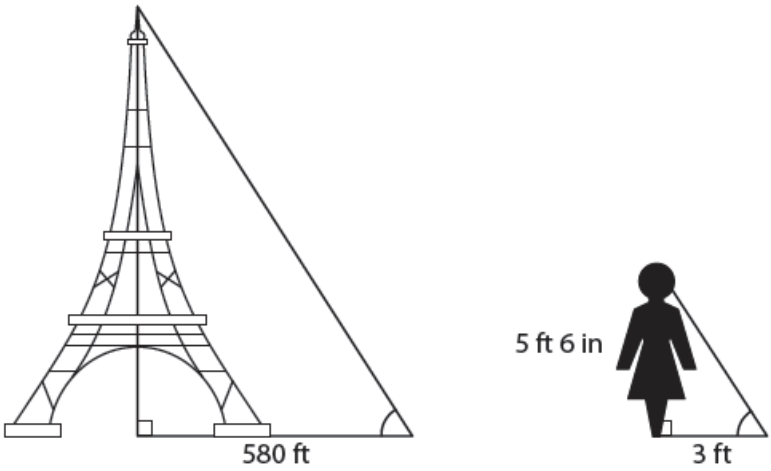
4. Identify the similar triangles and the statement that justifies their similarity. Find x and the measures of the indicated sides.



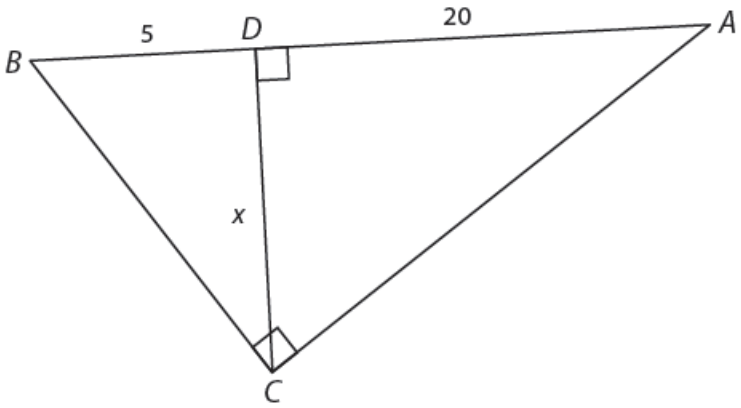
5. Assume that $\Delta ABC \sim \Delta FED$. Find x.



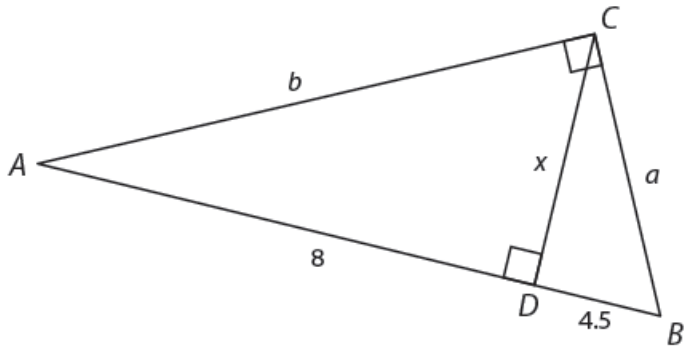
6. Sarah is standing near the Eiffel Tower in Paris, France. The shadow of the monument is 580 feet long, and Sarah's shadow is 3 feet long. If Sheila is 5'6", how tall is the monument?



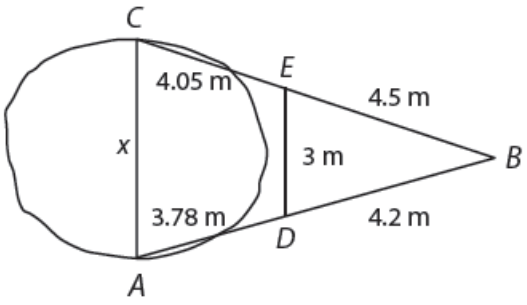
7. Find x.



8. Find the missing side lengths:



9. To measure $\overline{BC}$, the distance across a crater, and archaeologist stands at a point A and locates points B, C, D, and E. What is the distance across the crater?



10. The height of a ramp at a point 2.5 meters from its bottom edge is 1.2 meters. If the ramp runs for 6.7 meters along the ground, what is the height at its highest point, to the nearest tenth of a meter?