

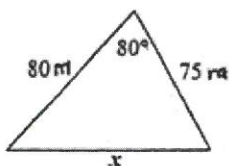
Show ALL work! Front and back!
 Hint: There are two 2 case problems
 and one no solution problem.

Law of Sines and Cosines Review:

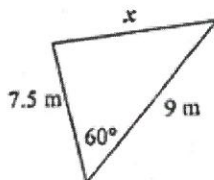
For #1 - 4,

Solve for the side or angle indicated in each.

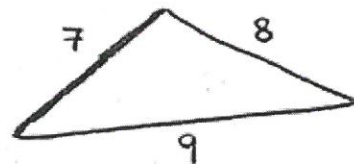
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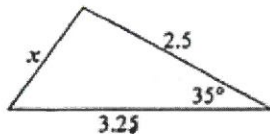
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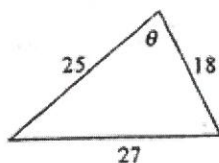
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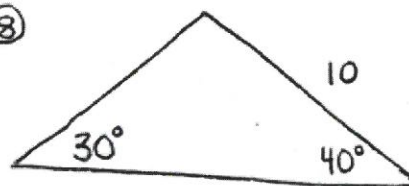
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④

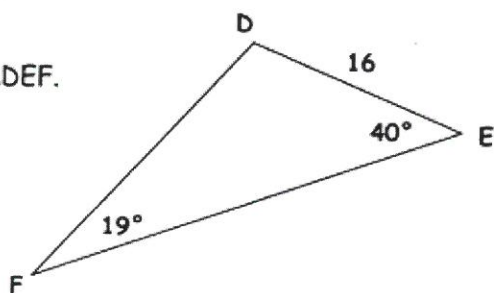


⑧



9. Two lookout towers, L and M , are 50 kilometers apart. The ranger in Tower L sees a fire at point C such that $m\angle CLM = 40^\circ$. The ranger in Tower M sees the same fire such that $m\angle CML = 65^\circ$. How far is the fire from Tower L ?

10. Find the perimeter of $\triangle DEF$.



For #11-14, solve the Triangles:

11. $a = 5$, $b = 8$, and $c = 10$

12. $b = 110$, $c = 180$, and $B = 40^\circ$

13. $a = 12$, $b = 7.8$, and $B = 35^\circ$

14. $m\angle A = 30$, side $b = 12$, and side $a = 8$?

15. Triangulation can be used to find the location of an object by measuring the angles to the object from two points at the end of a baseline. Two lookouts 20 miles apart on the coast spot a ship at sea. Using the figure below find the distance, d , the ship is from shore to the nearest tenth of a mile.

