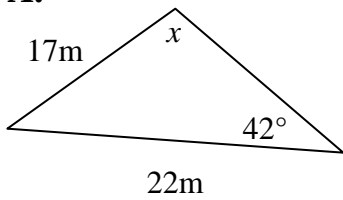


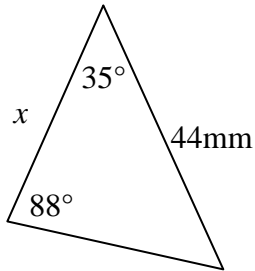
SINE LAW WORKSHEET

1. Solve for the unknown in each triangle. Round to the nearest tenth.

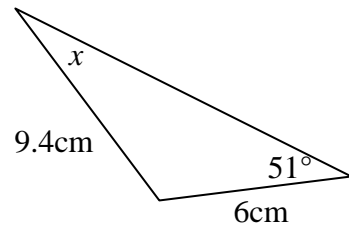
A.



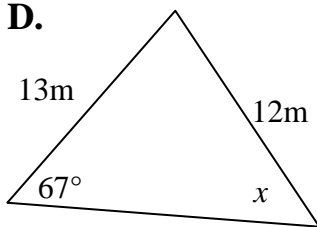
B.



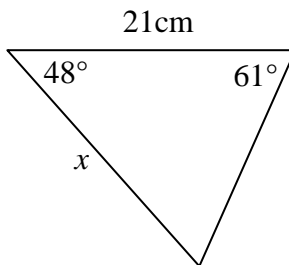
C.



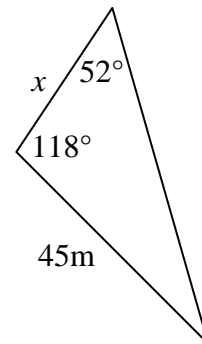
D.



E.

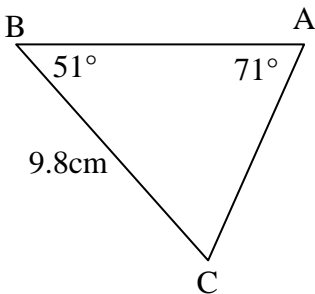


F.

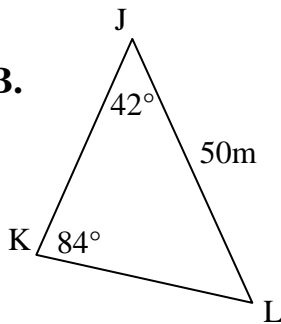


2. Solve for **all** missing sides and angles in each triangle. Round to the nearest tenth.

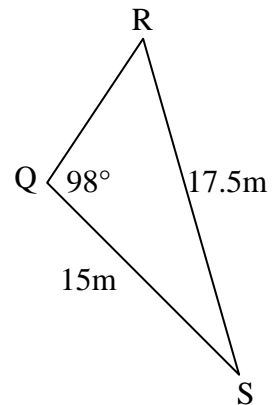
A.



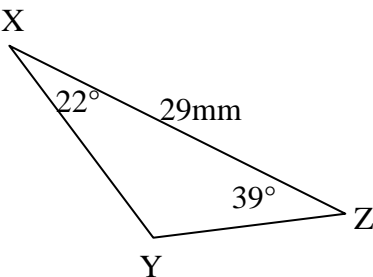
B.



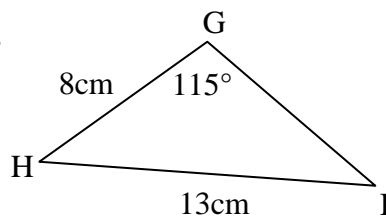
C.



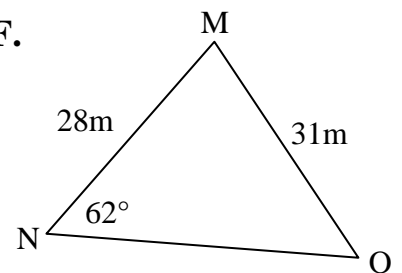
D.



E.



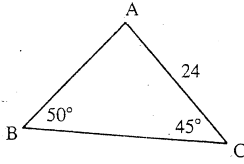
F.



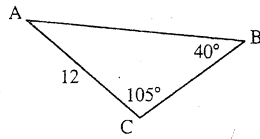
More Practice with Law of Sines:

1. Find the length of AB to 1 decimal place.

a)

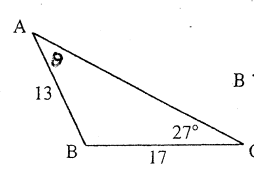


b)

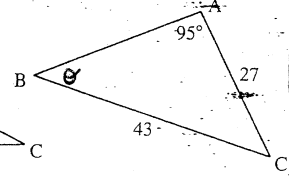


2. Find θ to 1 decimal place.

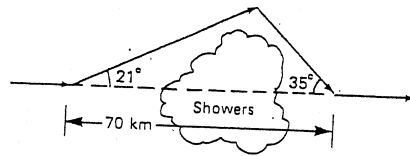
a)



b)



3. Suppose that you are the pilot of a commercial airliner. You find it necessary to detour around a group of thundershowers (see figure). You turn at an angle of 21° to your original path, fly for a while, turn, and intercept your original path at an angle of 35° , 70 kilometres from where you left it.



a. How much further did you have to go because of the detour?

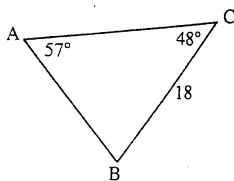
b. What area is enclosed by this triangle?

4. Solve each $\triangle XYZ$. Give the answers to 1 decimal place.

a) $\angle X = 72^\circ$, $\angle Z = 50^\circ$, $x = 34$ b) $\angle X = 78^\circ$, $x = 42$, $y = 28$

5. In $\triangle XYZ$, $\angle Y = 84^\circ$, $\angle Z = 33^\circ$, and $z = 9.2$; find x .

6. Find the Area. Use law of sines to find the missing info first.



7. A bridge AB (below left) is to be built across a river. The point C is located 62.0 m from B, and $\angle ABC = 74^\circ$ while $\angle ACB = 48^\circ$. How long will the bridge be?

