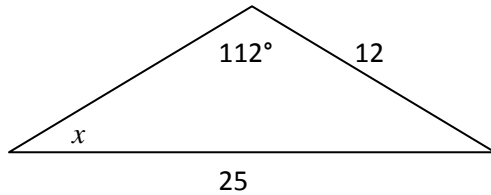
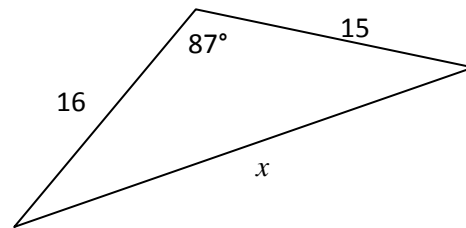


II. Determine whether the Law of Cosines or the Law of Sines is the best choice.

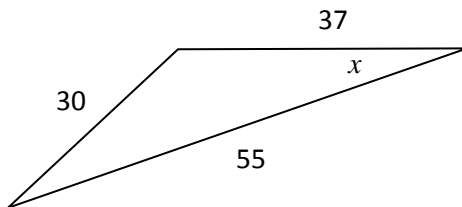
1. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).



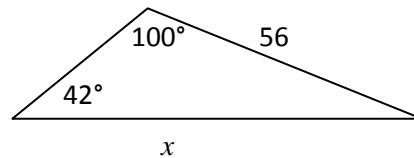
2. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).



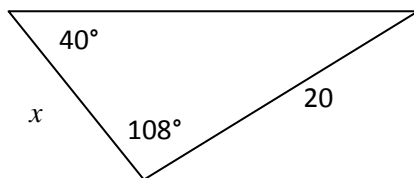
3. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).



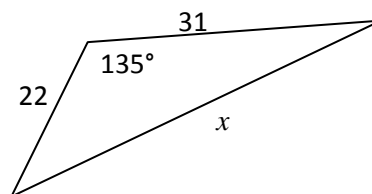
4. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).



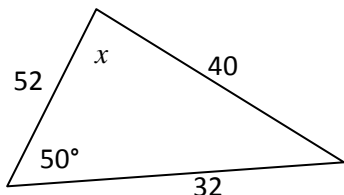
5. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).



6. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).



7. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).



8. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).

For $\triangle ABC$ find the length of b to the nearest hundredth, given $a = 17$, $c = 34$, and $m\angle B = 94^\circ$.

9. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).

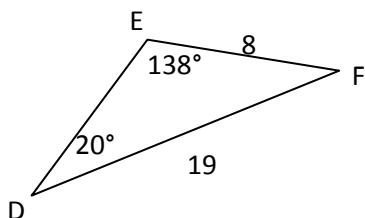
For $\triangle HJK$, $j = 31$, $m\angle H = 132^\circ$, $m\angle J = 21^\circ$, and $m\angle K = 27^\circ$. Find h to the nearest whole number.

10. State whether the Law of Sines or Law of Cosines is the best choice to solve for x for the given figure. Substitute the values into the appropriate formula (do not solve).

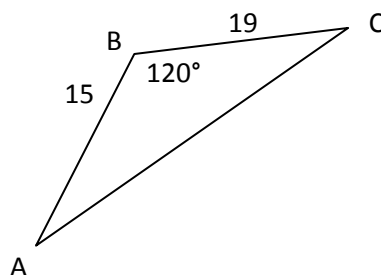
For $\triangle XYZ$ find the length of $m\angle Y$ to the nearest whole degree, given $x = 6$, $y = 9$, and $z = 12$.

III. Use the Law of Sines and Law of Cosines to find missing dimensions.

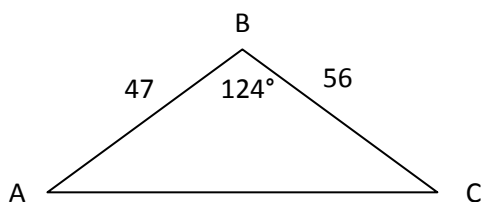
11. Find the missing dimensions of the triangle below. Round your answers to the nearest whole number.



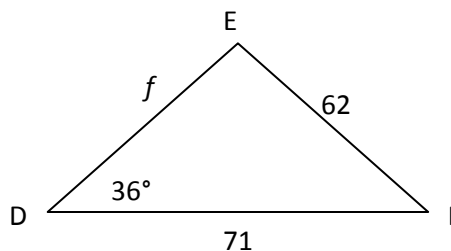
12. Find the $m\angle C$ to the nearest whole degree.



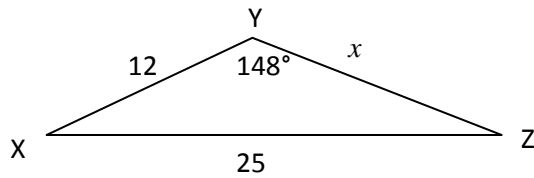
13. Find the missing dimensions of the triangle below. Round your answers to the nearest whole number.



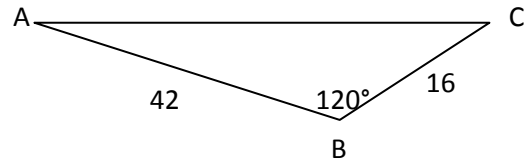
14. Find the f to the nearest whole number.



15. Find the x to the nearest whole number.

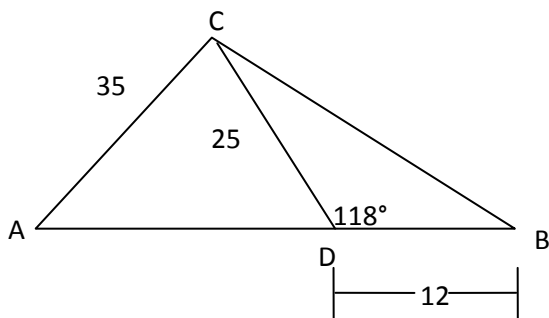


16. Find the $m\angle A$ to the nearest whole degree.

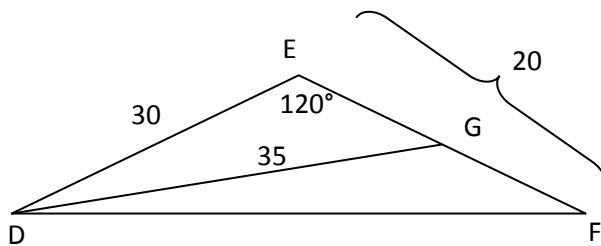


IV. Challenge Problems

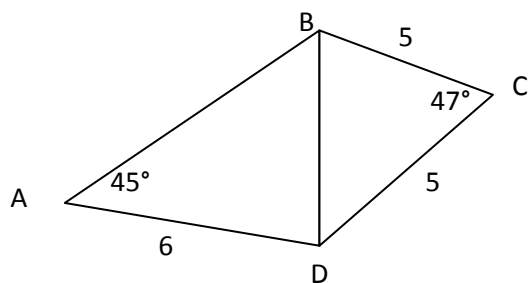
17. Find the $m\angle A$ to the nearest whole degree.



18. Find the $m\angle DGF$ to the nearest whole degree.



19. Find the $m\angle ABD$ to the nearest whole degree.



20. Find the angle measurements of all angles in the triangle below to the nearest whole degree.

