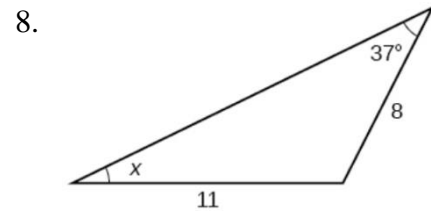
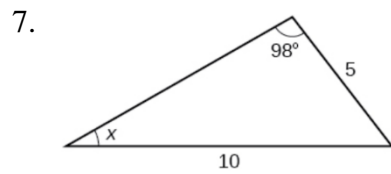
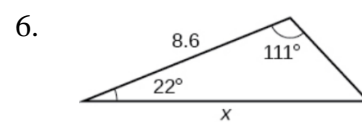
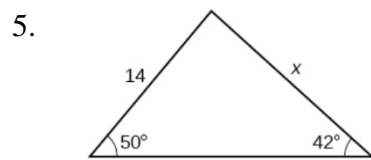
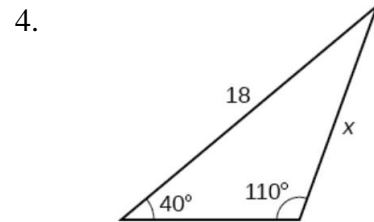
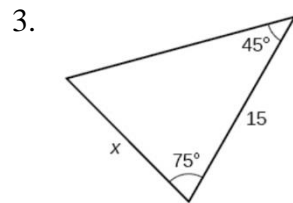
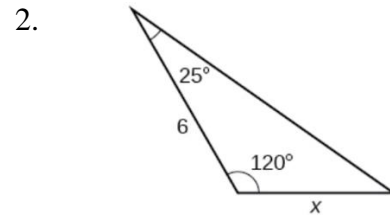
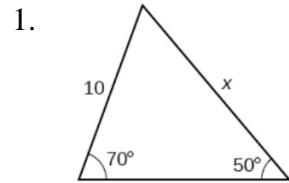


Pre-Calculus 1
5-1 Law of Sines

Name _____

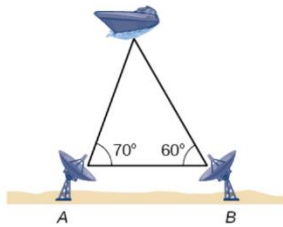
In the following triangles, solve for x .



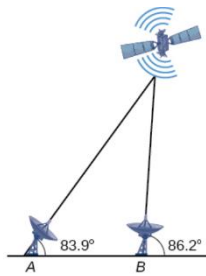
9. Solve triangle ABC if, $A = 82^\circ$, $a = 29$ and $b = 24$.

10. Solve triangle ABC if, $C = 145^\circ$, $b = 7$ and $c = 33$.

11. To determine how far a boat is from the shore, two radar stations 500 feet apart find the angles out to the boat, as shown in the figure. Determine the distance of the boat from station A.



12. The figure shows a satellite orbiting Earth. The satellite passes directly over two tracking stations A and B, which are 69 miles apart. When the satellite is on one side of the two stations, the angles of elevation are as shown in the figure. How far is the satellite from station A and how high is the satellite above the ground? Round answers to the nearest mile.



13. A pilot is flying over a straight highway. He determines the angles of depression to two mileposts, 4.3 km apart, as shown in the figure. Find the distance of the plane from point A to the nearest tenth of a kilometer.

