1) For the triangle below, find all the remaining sides and angle using the Law of Sines.

2) A pole tilts toward the sun and casts a shadow as showing in the picture below. How tall is the pole using the Law of Sines?

3) For the triangle below, find all the remaining sides and angle using the Law of Sines.

4) Find the two triangles measurements with $a=12$ meters, $b=31$ meters, and $A=20.5^{\circ}$.
5) How many triangles are formed by the known measurements of $a=15, b=25$, and $A=85^{\circ}$.
6) Find the area of the oblique triangle below.

7) Find the measurements of the three angles of the triangle below using the Law of Cosines.

8) Find the remaining angles and side using the Law of Cosines.

9) Find Angle $B$ in the picture below using the Law of Cosines.

10) Use Heron's Area Formula to find the area of a triangle with sides of lengths $a=43 \mathrm{~m}, \mathrm{~b}=53 \mathrm{~m}$, and $\mathrm{c}=72 \mathrm{~m}$.
