**Name:** _____ **Class:** _____ **Date:** _____ **ID: A**

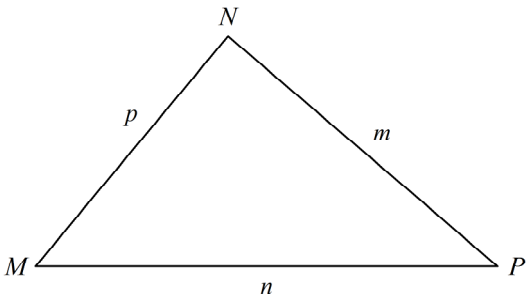
# Algebra 2 (A/B) Quiz 8.5 and 13.5

**1.** (10 points)
A triangle has a side with length 6 feet and another side with length 8 feet. The angle ***between the sides*** measures 73º.

Use the formula: $a = \frac{1}{2} \cdot b \cdot c \cdot \sin A$ to find the area of the triangle.

**2.** (10 points)
Solve the triangle. m$\angle N = 118°$, m$\angle P = 33°$, and $m = 15$. Round to the nearest tenth.

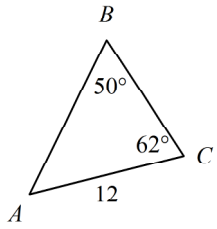
The Law of Sine is: $\frac{SinA}{a} = \frac{SinB}{b}$




m$\angle M$ =_____ , $n \approx$ _____ , $p \approx$ _____

**3.** (10 points)

Find $AB$. Round to the nearest tenth. The Law of Sine is: $\frac{SinA}{a} = \frac{SinB}{b}$




**4.** (10 points)

Use a calculator to find the trigonometric ratios. Round to the nearest hundredth.

$\sin 131° =$ .

$\cos 118° =$

$\tan 115° =$

**5.** (10 points)

Find $AC$. Round to the nearest tenth. The Law of Sine is: $\frac{SinA}{a} = \frac{SinB}{b}$