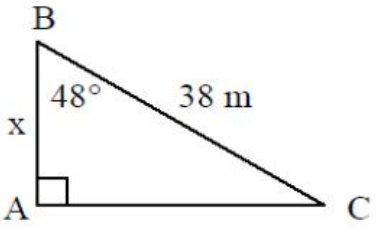
Geometry B Name: _____

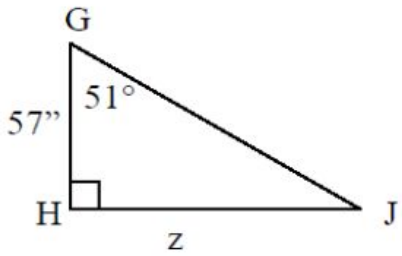
Unit 2 Topic 2 – Homework #1B/2A

Part I: Finding Missing Sides using Trig Ratios

1. Determine the length of side x to the nearest hundredth.

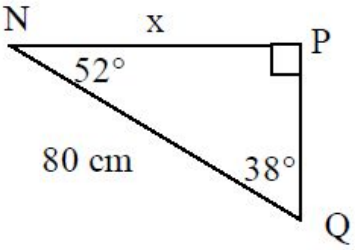


2. Determine the length of side z to the nearest inch.



3. See below...

9. For the triangle pictured, Marcy placed her finger on the 38° angle and concluded that $\sin 38° = \frac{x}{80}$. Likewise, Timmy placed his finger on the 52° angle and concluded that $\cos 52° = \frac{x}{80}$.



a) If you solve it Marcy's way, what answer will she get?

b) If you solve it Timmy's way, what answer will he get?

c) Are these results reasonable? Explain.

Part II: Inverse Trig Functions

Solve the following equations using Inverse Trig Functions. Round your answers to the nearest hundredth.

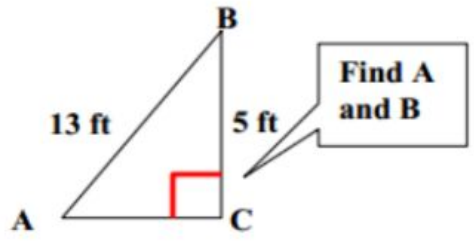
1. $\cos\theta = \frac{9}{17}$

2. $\frac{2}{3} = \sin\theta$

3. $\tan\theta = \frac{7}{6}$

Part III:

1.



2.