

Precalculus
Trig Applications, Inverse Trig Functions - Review

Name _____ Period _____

I. Draw the unit circle and triangles (with labels) for each inverse. Find all the x values.
Circle your answers.

1. $\sin^{-1}\left(\frac{\sqrt{3}}{2}\right) =$

6. $\sec^{-1}(-2) =$

2. $\cos^{-1}(0) =$

7. $\csc^{-1}\left(\frac{2}{\sqrt{3}}\right) =$

3. $\tan^{-1}\left(-\frac{1}{\sqrt{3}}\right) =$

8. $\cot^{-1}(-\sqrt{3}) =$

4. $\csc^{-1}(2) =$

9. $\cos(\cot^{-1} 0) =$

5. $\sec^{-1} \infty =$

10. $\sin(\tan^{-1} \infty) =$

II. Find the principle values of the following functions. Draw the unit circle and triangles for each inverse. Circle your answers.

11. $x = \cos^{-1}\left(-\frac{1}{\sqrt{2}}\right)$

12. $x = \sin^{-1}\left(\frac{\sqrt{3}}{2}\right)$

III. Application Problems - Rework Problems for the Trig Application Problems WS