8.2 General Solutions of Inverse Values **Name:_____**

For each problem find the exact:

a.) general solution in **radians**

b.) first three positive values of x

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

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

3. $\tan x = \left(-\sqrt{3}\right)$

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

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

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

7. $x = \tan^{-1}(-1)$

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

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

10. $\sin x = (-1)$

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

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