8.1 Inverse Values on the Unit Circle Notes

EQ: How do inverse values relate to the unit circle?

How do I find an inverse value?

$$\sin 30^{o} = \frac{1}{2}$$

Find the inverse value in radians for $0 \le x < 2\pi$ or $[0, 2\pi)$

1. $\cos^{-1}\left(\frac{1}{2}\right)$

2. $\arcsin\left(-\frac{1}{\sqrt{2}}\right)$

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

Will there always be two locations for an inverse?

Quadrantal inverses (on the lines)

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

5. $\sin^{-1}(-1)$

6. $\tan^{-1}1$

Will 0's and 1's always be quadrantal or can you draw a triangle for some?

Summary