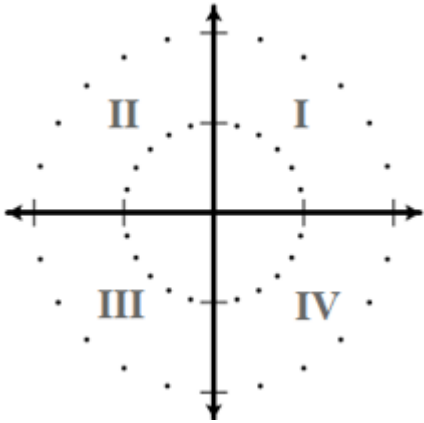
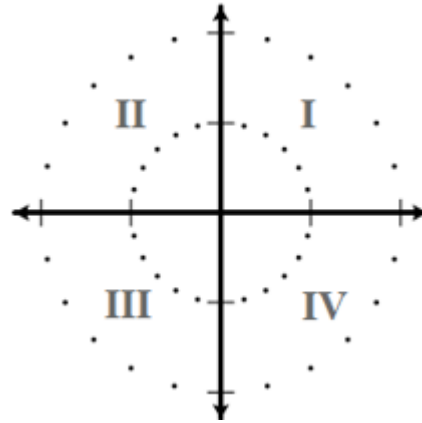


Which 2 quadrants are included in the output (range) of each of the inverse trigonometric functions?

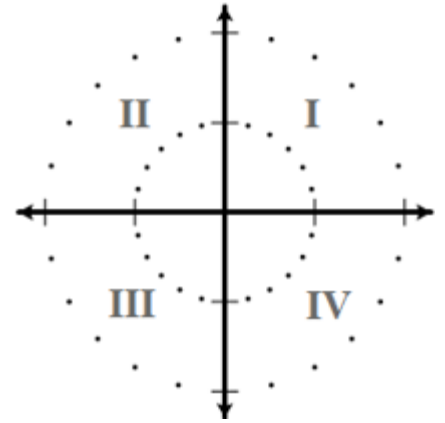
1. $y = \text{Sin}^{-1}(x)$



2. $y = \text{Cos}^{-1}(x)$

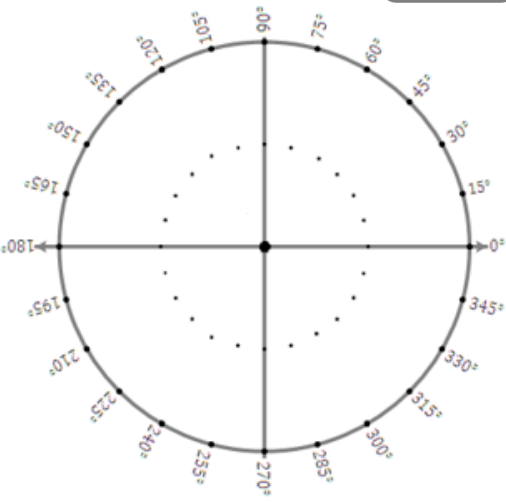


3. $y = \text{Tan}^{-1}(x)$

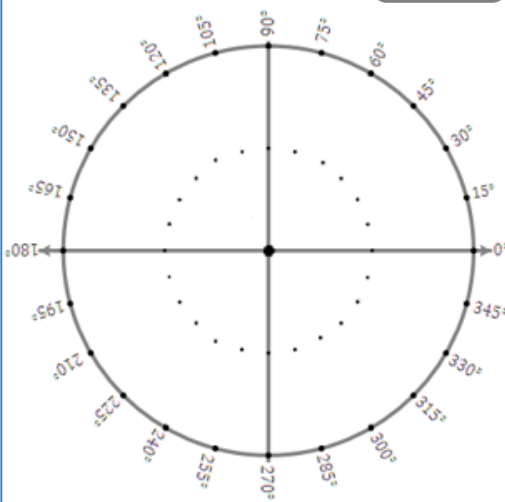


Determine the exact value of each of the following in degrees and draw a representation using the circle.

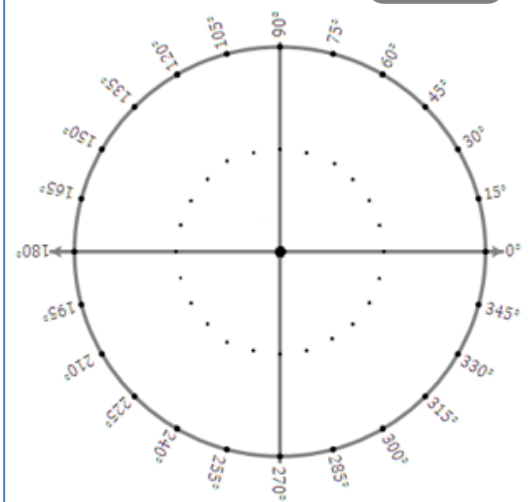
4. $\text{Sin}^{-1}\left(\frac{\sqrt{3}}{2}\right) =$



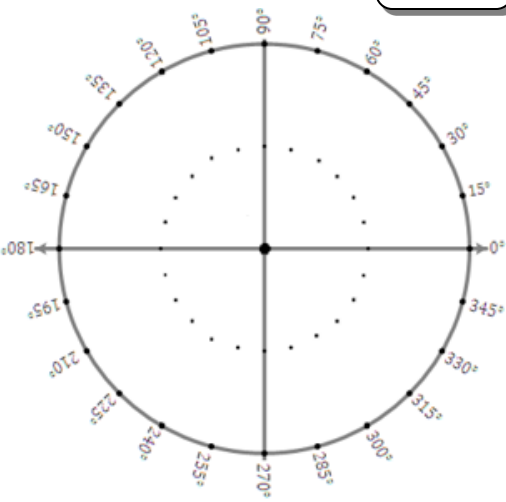
5. $\text{Cos}^{-1}\left(-\frac{1}{2}\right) =$



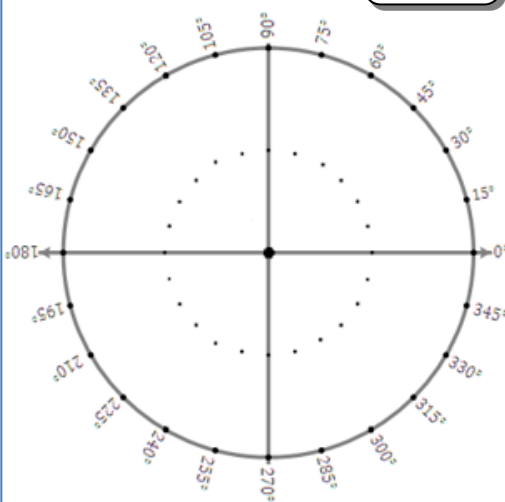
6. $\text{Sin}^{-1}\left(-\frac{\sqrt{2}}{2}\right) =$



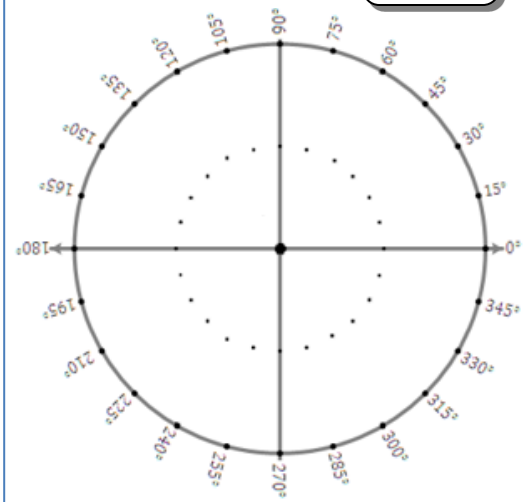
7. $\text{Tan}^{-1}\left(-\frac{\sqrt{3}}{1}\right) =$



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

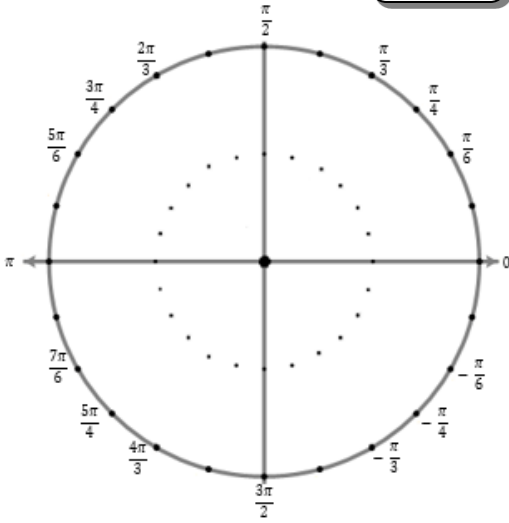


9. $\text{Tan}^{-1}(1) =$

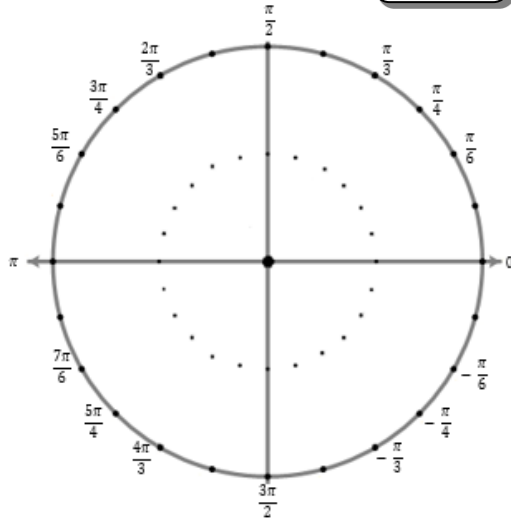


Determine the exact value of each of the following in radians and draw a representation using the circle.

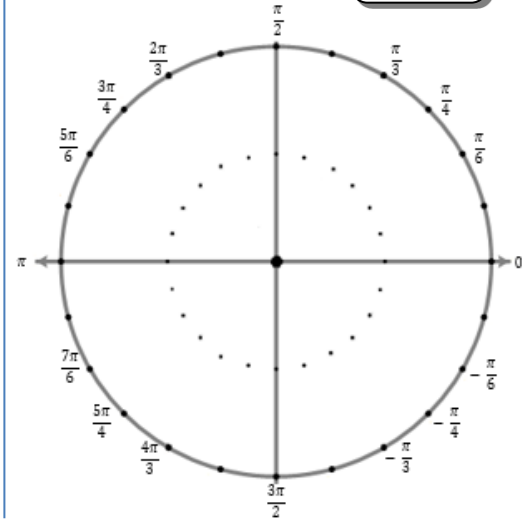
10. $\text{Sin}^{-1}\left(\frac{1}{2}\right) =$



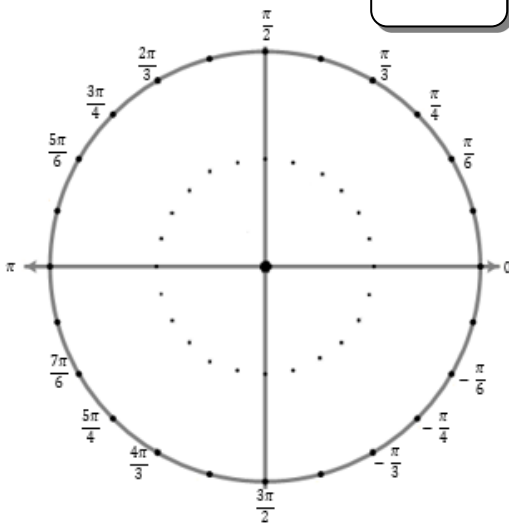
11. $\text{Cos}^{-1}\left(-\frac{\sqrt{3}}{2}\right) =$



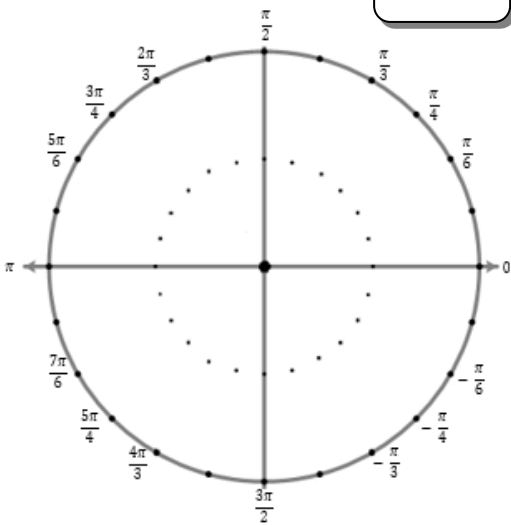
12. $\text{Sin}^{-1}\left(-\frac{\sqrt{2}}{2}\right) =$



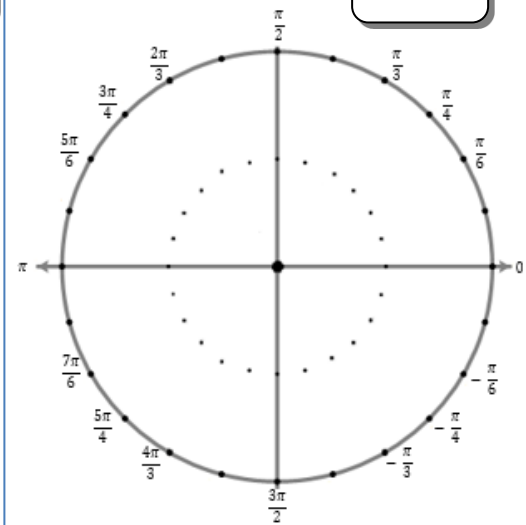
13. $\text{Tan}^{-1}\left(\frac{\sqrt{3}}{1}\right) =$



14. $\text{Cos}^{-1}\left(\frac{\sqrt{2}}{2}\right) =$



15. $\text{Tan}^{-1}(-1) =$



Approximate the value of each of the following in radians using your calculator.

11. $\text{Sin}^{-1}(0.85) \approx$

11. $\text{Cos}^{-1}(\sqrt{0.5}) \approx$

12. $\text{Tan}^{-1}(-1.32) \approx$

In your own word explain why you think the output (i.e. range) of the inverse trigonometric functions has to be restricted. _____
