Calculus 2
Derivatives for Inverse Trigonometric Functions

1. $y = sin^{-1}(\pi x)$

2. $y = cos^{-1}(\pi x)$

3. $y = cos^{-1}(2\pi x)$

4. $y = sin^{-1}(2\pi x)$

5. $y = tan^{-1}\left(\frac{x}{4}\right)$

6. $y = tan^{-1}\left(\frac{x}{8}\right)$

7. $y = sin^{-1}(3x + 5)$

8. $y = sin^{-1}(4x + 3)$

9. $y = cos^{-1}(e^x)$

10. $y = sin^{-1}(e^x)$

11. $y = tan^{-1}[ln(x^2)]$

12. $y = tan^{-1}[ln(x^3)]$

13. $y = x\,sin^{-1}(x)$

13. $y = 3x\,sin^{-1}(x)$

15. $y = e^{cos^{-1}(x)}$

15. $y = e^{sin^{-1}(x)}$

17. $y = ln[tan^{-1}(x)]$

17. $y = ln[cos^{-1}(x)]$

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

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

21. $y = x - tan^{-1}(x)$

21. $y = x^2 - tan^{-1}(x)$

23. $y = tan^{-1}\left(\frac{x-1}{x+1}\right)$

22. $y = tan^{-1}\left(\frac{x}{x+1}\right)$

25. $y = tan^{-1}[ln(x)]$

24. $y = tan^{-1}[e^x]$