

WS On Inverse Trig Functions

Name _____

Evaluate

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

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

3. $\arctan(-1)$

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

5. $\sec^{-1}\sqrt{2}$

6. $\arcsin(1)$

Find the Derivative:

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

2. $y = \arctan(e^x)$

3. $y = (1+x^2)\arctan x$

4. $y = \sin^{-1}\left(\frac{4}{t}\right)$

5. $y = \arctan(\cos \theta)$

6. $y = (\sin^{-1} \theta)^2$

7. $y = \sqrt{1-x^2} \sin^{-1} x$

8. $y = (\arctan x) \ln x$

9. $y = e^{\sec^{-1} x}$

• 10. $y = x \cos^{-1} x - \sqrt{1-x^2}$

11. $y = \tan^{-1}(x - \sqrt{x^2+1})$