

Derivatives of Inverse Trigonometric Functions

Directions: Find the derivative of each function.

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

2. $f(x) = \tan^{-1}(x^3 + 1)$

3. $g(x) = \sec^{-1}(x^3 - 3)$

4. $h(x) = \cos^{-1}(\sin x)$

5. $f(x) = \cot^{-1}(x^3 + x^2)$

6. $f(x) = \csc^{-1}(x^5)$

7. $f(x) = \sin^{-1}(e^{2x})$

8. $f(x) = \tan^{-1}(\cos 5x)$

9. $h(x) = \sin^{-1}(\ln x)$

10. $h(x) = \sec^{-1}(x^4 - 1)$