

Find the derivative of the given function.

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

2)  $y = 5 \cos^{-1}(6t)$

3)  $y = \tan^{-1} \sqrt{7x}$

Find  $dy/dx$ .

4)  $f(x) = 3e^{-9x}$

5)  $y = 5^x$

6)  $y = \ln(5x^3)$

7)  $y = \log(4x - 8)$