

# Derivative of $f^{-1}$ WS

Directions: Find the derivative of the inverse of each function @ the indicated value.

1)  $y = x + \frac{1}{x}$  @  $y = \frac{17}{4}$ ; where  $x > 1$

2)  $y = 3x - 5x^3$  @  $y = 2$

3)  $y = e^x$  @  $y = e$

4)  $f(x) = x^7 - 2x^5 + 2x^3$  @  $f(x) = 1$

5)  $y = x + x^3$  @  $y = -2$

6)  $y = 4x - x^3$  @  $y = 3$

7)  $y = \ln x$  @  $y = 0$

8)  $y = \sqrt[3]{x} + \sqrt[5]{x}$  @  $y = 2$