

Derivative Review WS

Directions: Find the derivative of each of the following functions:

$$1) y = 6x^5 - x + 10$$

$$2) f(x) = \frac{1}{x} + \frac{1}{\sqrt[3]{x^2}}$$

$$3) y = \frac{5x^6 - 1}{x^2}$$

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

$$5) y = 10 \cot(2x-1)$$

$$6) y = 3x \sec(3x)$$

$$7) y = 10 \cos[\sin(x^2-4)]$$

$$8) y = 8 \cos^{-1}(2x)$$

$$9) y = 3e^5 + 4xe^x + \ln(x^2+3)$$