

Find the derivative (with respect to  $x$ ) for each of the following. Do not simplify.

(1)

$$x^2y^3 = \sqrt{2x-5} + \sin(8y+3)$$

(2)

$$f(x) = \left( \frac{8x+3}{2x^2-3} \right)^5$$

(3)

$$y = \sqrt[4]{(1-3x)^4 + x^4}$$