

Quotient Rule WS

Directions: Find the equation for the slope of the tangent line.

$$1) y = \frac{\sqrt{x} - 4x}{2^x}$$

$$2) f(x) = \frac{\ln x + \sin x}{3e^x}$$

$$3) y = \frac{x^4 - 3x^3 + 6x^2 - 8}{x^2}$$

$$4) f(x) = \frac{\csc x}{\cot x}$$

$$5) y = \frac{9}{\ln x}$$

$$6) f(x) = \frac{x^2 - e^x + \sin x}{\sqrt{x^3}}$$

$$7) y = \frac{-2x^3 - 3x}{\tan x} + \frac{x^4}{\ln x} - \frac{13}{\cos x}$$

$$8) f(x) = \frac{\frac{1}{x} + \frac{3}{x^2 - 4}}{e^x}$$