

Limit definition Part2

Date _____ Period ____

Use the limit definition of the derivative to find the derivative of each function with respect to x

1) $y = 2x^2 - 3x + 1$

$$\frac{dy}{dx} = 4x - 3$$

2) $y = 5x + 1$

$$\frac{dy}{dx} = 5$$

3) $y = \sqrt{4x - 5}$

$$\frac{dy}{dx} = \frac{2}{\sqrt{4x - 5}}$$

4) $y = \frac{1}{x + 4}$

$$\frac{dy}{dx} = -\frac{1}{x^2 + 8x + 16}$$