

Quiz 3

Your name:

Your TA's name:

1. Find an equation of the tangent line to the curve $\frac{y^2 + x^2}{2x + 3y} = -2x$ at the point $(-1, 1)$.

2. Find the derivative of the function $y = \sqrt[3]{\frac{4x-1}{3x+7}}$.

3. A 25-foot ladder is leaning against a vertical wall. If the base of the ladder is pulled horizontally away from the wall at a rate of 0.2 ft/sec, how fast is the top of the ladder sliding down that wall at the instant when it is 20 feet from the ground?