

9C (Part 2) The Chain Rule

1. Given that $y = (3x^4 + x)^5$, find $\frac{dy}{dx}$ using the chain rule.

2. Given that $y = \sin^4 x$, find $\frac{dy}{dx}$

3. Given that $y = \sqrt{5x^2 + 1}$, find the gradient of the curve at (4,9).