

Calculus Worksheet #1 Unit 5 _____

Use the chain rule to find dy/dx for each of the following functions.

1. $y = (2x - 3)^5$ $dy/dx =$ _____

2. $y = (1 - 3x^4)^3$ $dy/dx =$ _____

3. $y = (x^3 - 5)^4$ $dy/dx =$ _____

4. $y = \frac{1}{5x - 3}$ $dy/dx =$ _____

5. $y = \frac{1}{(3x + 2)^2}$ $dy/dx =$ _____

6. $y = \sqrt{5x - 1}$ $dy/dx =$ _____

7. $y = \sqrt{x^2 + 4}$ $dy/dx =$ _____

8. $y = \frac{5}{\sqrt{4 - 9x^2}}$ $dy/dx =$ _____