Chain Rule … Set 2

Chain Rule Practice Problems

Finding a Derivative **In Exercises 7–34, find the derivative of the function.**

Chain Rule: $\frac{d}{dx}[f(g(x)] = f'[g(x)] * g'(x)$

1. $y = (5x - 8)^4$

2) $y = (4x - 1)^3$

3) $y = 5(2 - x^3)^4$

4) $g(x) = 3(4 - 9x)^4$

5) $f(t) = \sqrt{5 - t}$

6) $y = \sqrt[3]{6x^2 + 1}$

7) $f(x) = \sqrt{x^2 - 4x + 2}$

8) $y = 2\sqrt[4]{9 - x^2}$

Chain Rule … Set 2

Find the derivative of the function below:

Chain Rule: $\frac{d}{dx}[f(g(x)] = f'[g(x)] * g'(x)$

9) $y = \dfrac{1}{x-2}$

10) $y = \dfrac{1}{\sqrt{3x+5}}$

11) $y = \dfrac{x}{\sqrt{x^2+1}}$

12) $y = \dfrac{x}{\sqrt{x^4+4}}$

13) $g(x) = \left(\dfrac{x+5}{x^2+2}\right)^2$

14) $g(x) = \left(\dfrac{3x^2-2}{2x+3}\right)^3$