

Practice Chain Rule Problems

Find $f'(x)$.

1. $f(x) = \ln(2x^2 - 7x + 20)$

2. $f(x) = e^{-x^3 + x^2 - 2x}$

3. $f(x) = \tan(1 - x^2)$

4. $f(x) = 3x^2 + \ln(2x + 6)$

5. $f(x) = 1 - e^{6x^2 + x^{-1}}$

6. $f(x) = \sin(2x) - \cos(1 - x)$

7. $f(x) = (2x - 1)e^{1 - x^4}$

8. $f(x) = x \ln(x^{-1} + \sqrt{x})$

9. $f(x) = \frac{\sin(3x - 1)}{\sqrt{x}}$

10. $f(x) = (\cos(4x))^2 - (\tan 2x)^2$

11. $f(x) = [\ln(11x - 1)]^{1/2}$

12. $f(x) = x^6 - \ln(\sin(5x))$

13. $f(x) = \frac{e^{2x - 3}}{6x^2 - 5x + 1}$

14. $f(x) = \sec(9x - \ln x)$