

Chapter 3.1: Practicing the Power Rule

Calculus I

College of the Atlantic. October 10, 2022

Take the derivative of the following functions:

1. $f(x) = 6$

2. $f(x) = 6x$

3. $f(x) = 6x + 60x$

4. $f(x) = x^6$

5. $f(x) = x^6 + 66$

6. $f(x) = x^{-6}$

7. $f(x) = -x^{-6}$

8. $f(x) = -x^6$

9. $f(x) = 6^x$

10. $f(x) = -x^{\frac{1}{6}}$

11. $f(x) = 6x^6$

12. $f(x) = \frac{x^6}{6}$

13. $f(x) = x^3 + 2x^{-3} - 3x^{-4}$

14. $f(x) = \frac{x^2 - 4 + 3x}{\sqrt{x}}$

15. $f(x) = x^\pi$