

# Chapter 3.1: Practicing the Power Rule

## Calculus I

College of the Atlantic. Fall 2016

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