Chapter 2.2: Derivative at a Point Calculus I

College of the Atlantic. Fall 2018

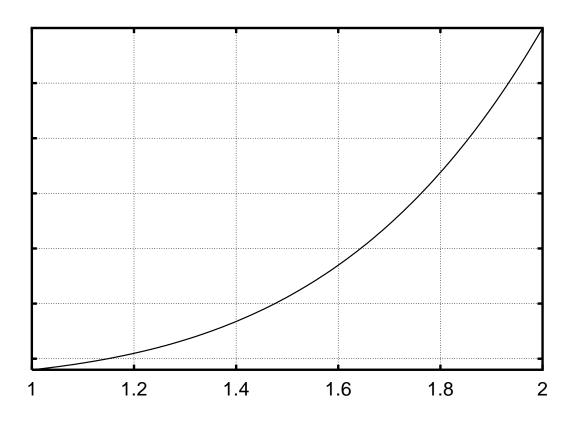


Figure 1: A function

- 1. Show how to represent the following lengths on Fig. 1.
 - (a) f(1.8)
 - (b) f(1.2)
 - (c) f(1.8) f(1.2)
 - (d) $\frac{f(1.8)-f(1.2)}{1.8-1.2}$
 - (e) f'(1.2)

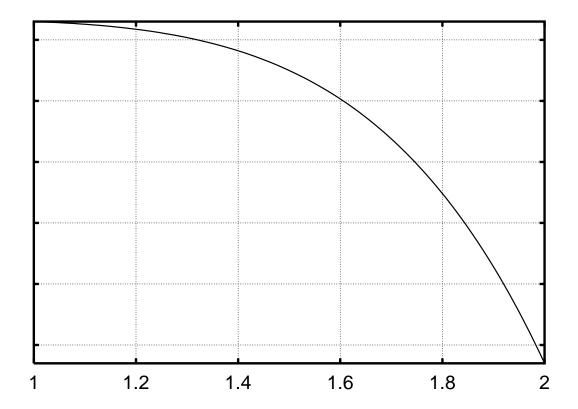


Figure 2: Another function

- 2. For the function in Fig. 2, determine which of the following pairs of numbers is larger. Note that the y-axis scale might be different than the x-axis scale.
 - (a) f(1.2) and f(1.4)
 - (b) f(1.4) f(1.2) and f(1.6) f(1.4)
 - (c) $\frac{f(1.4)-f(1.2)}{1.4-1.2}$ and $\frac{f(1.6)-f(1.4)}{1.6-1.4}$
 - (d) f'(1.2) and f'(1.6)

(Remember that a "bigger negative" number is smaller than a "less negative number." I.e., -4 < -2.)