Chapter 2.1: Average Velocities

Calculus I

College of the Atlantic. Fall 2018

t, in minutes	distance from BH, in miles
0	0
2	1.7
4	3.5
6	5.4
8	7.4
10	9.0
12	10.2
14	12.1
16	13.9
18	15.5
20	15.7
22	16.8
24	18.6
26	20.7

1. The table above shows data for the first portion of a trip from Bar Harbor to Bangor.
   (a) What is the average velocity of the car between times $t = 2.0$ and $t = 4.0$?
   (b) What is the average velocity of the car between times $t = 18.0$ and $t = 20.0$?
   (c) What is the average velocity of the car between times $t = 14.0$ and $t = 26.0$?

2. Suppose a narwhal moves in a straight line such that its distance from its starting point is given by the function $x(t) = 2\sqrt{3t}$.
   (a) What is the average velocity of the narwhal between times $t = 2.0$ and $t = 6.0$?
   (b) What is the average velocity of the narwhal between times $t = 6.0$ and $t = 12.0$?
   (c) What is the average velocity of the narwhal between times $t = 2.0$ and $t = 12.0$?