

## Chapter 2.1: Average Velocities

### Calculus I

College of the Atlantic. Fall 2014

$t$ , 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

- The table above shows data for the first portion of a trip from Bar Harbor to Bangor.
  - What is the average velocity of the car between times  $t = 2.0$  and  $t = 4.0$ ?
  - What is the average velocity of the car between times  $t = 18.0$  and  $t = 20.0$ ?
  - What is the average velocity of the car between times  $t = 14.0$  and  $t = 26.0$ ?
- Suppose a worm moves in a straight line such that its distance from its starting point is given by the function  $x(t) = 2\sqrt{3t}$ .
  - What is the average velocity of the worm between times  $t = 2.0$  and  $t = 6.0$ ?
  - What is the average velocity of the car between times  $t = 6.0$  and  $t = 12.0$ ?
  - What is the average velocity of the car between times  $t = 2.0$  and  $t = 12.0$ ?