

## Average Velocities

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