MA 181 WORKSHEET (2.6) B

1. s(t) is the height of an object in feet with respect to time in seconds. Interpret the following:

   A. $s'(6) = 5$ B. $s'(10) = -2$ C. $s'(30) = 0$

2. The quantity demanded (in millions) of an item that is sold by a at a price of p dollars D = f(p). Interpret the following:

   A. $D'(40) = 100$ B. $D'(100) = -20$

3. The population of a town (in thousands) is given by P(t) where t is years since 1900. Interpret the following:

   A. $P'(40) = -10$ B. $P'(100) = 30$

4. Suppose that the line tangent to the graph of y = g(x) at x = 4 passes through the points (-5, 10) and (8, -3).

   A. Find g ’(4).

   B. Find the equation of the line tangent to g(x) at x = 4.

   C. Find g(4).