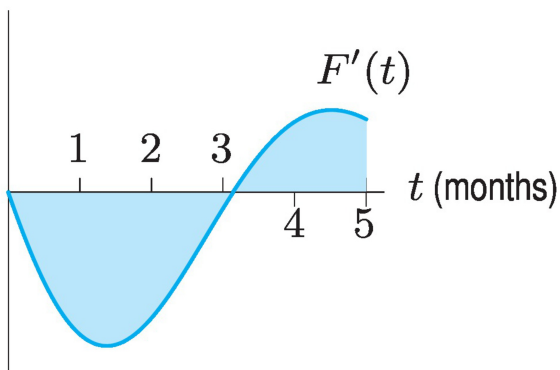**Name:**
Section 5.5 – example
Math 151

1. The graph shows $F'(t)$, the rate of change of the value, $F(t)$, of an investment over a 5-month period.

rate of change of value
of investment ($/month)

   (a) When is the value of the investment increasing in value and when is it decreasing?

   (b) Does the investment increase of decrease in value during the 5 months.

2. The marginal cost, $C'(q)$ (in dollars per unit) of producing q units is given in the following table

q	0	100	200	300	400	500	600
$C'(q)$	25	20	18	22	28	35	45

   (a) If the fixed cost is $10,000$, estimate the total cost of producing 400 units.

   (b) How much would the total cost increase if production increases one unit, to 401 units.