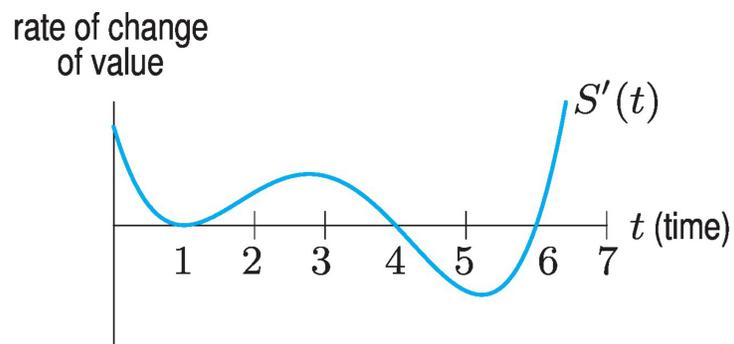


Name:
Section 4.1
Math 151

1. Find and classify the critical points of $x^3 - 9x^2 - 48x + 52$ using the second derivative test.

2. The value of an investment at time t is given by $S(t)$. The rate of change, $S'(t)$, of the value of the investment is shown in the figure below



(a) What are the critical points of the function $S(t)$.

(b) Identify each critical point as a local maximum, a local minimum, or neither.

(c) Explain the financial significance of each of the critical points.