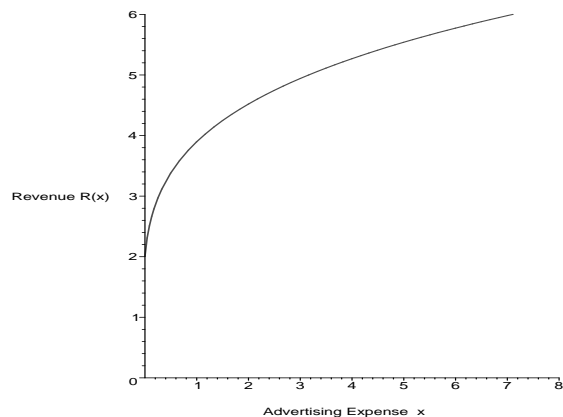


5. (10 points)



The above graph describes the revenue of Mammoth Corporation as a function of its advertising budget, expressed in hundreds of millions of dollars.

- (a) Interpret the meaning of the  $y$ -intercept of the graph in the context of this problem.
- (b) What does the concavity of the graph indicate in terms of revenue and the amount spent on advertising?
- (c) What does the statement  $R'(4) = .297$  mean in practical terms?
- (d) Assuming the graph gives a valid estimate of the company's revenues as a function of money spent on advertising, should they spend as much as possible on advertising? If so, explain why. If not, explain why not and give your best approximation for the amount the company should spend.