Section 4.7: Optimization

(1) In this section, we learn how to use calculus to find the minimum and maximum value of functions in modeling problems. We have used calculus before to find the minimum and maximum values of a function. Describe how this works.

(2) When solving an optimization problem, there are several steps we often take. What are those steps?

(3) Once we find our critical points, we need to check that we actually have an absolute minimum or maximum. How can we do this?

(4	1) Just like in the related rates section, there are various expressions/formulas/theorems you need to use when solving these problems. Make a note of the ones that come up in the examples you've done. Provide details for any that you are not completely comfortable with.
Ex	tra Practice in Book: 4.7: 1, 5, 7, 11, 16, 21, 36