

**CALCULUS JOURNAL
OPTIMIZATION**

1. Write a list of steps for solving optimization problems.

2. (a) You can determine the number of equations necessary to solve an optimization problem by _____
_____.

(b) When two expressions are necessary to represent two different parts of the problem, you can determine which expression to set up as the function by _____
_____.

3. In area and volume problems, the upper value of the interval for the variable in the function to be maximized can be determined by subbing _____ in for _____ variable in the (circle one) “function to be optimized” OR “the equation limited by a set value.”

4. List three **specific & valuable** tips for working optimization problems. (Do not give vague generalities such as “Draw a picture.”)

1) _____

_____.

2) _____

_____.

3) _____

_____.

5. The type of optimization problem I most prefer to do is _____
while the type of problem I least prefer to do is _____.
6. List the following rules, facts, or formulas.
- a) Formula relating revenue, cost, and profit.