

Name: _____

Math 211 Quiz 8

Section: 302

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Mar 21, 2012

1. Find the absolute maximum and absolute minimum of the given function on the specified interval.

$$f(x) = x^2 + 4x + 5; -3 \leq x \leq 1$$

2. A Florida citrus grower estimates that if 60 orange trees are planted, the average yield per tree will be 400 oranges. The average yield will decrease by 4 oranges per tree for each additional tree planted on the same acreage. How many trees should the grower plant to maximize the total yield?

Bonus problem. A city recreation department plans to build a rectangular playground having an area of 3,600 square meters and surround it by a fence. How can this be done using the least amount of fencing?