Answer the questions in the spaces provided. Show all of your work and circle the answer you would like to have graded for each question.

Name and section:

1. Twenty feet of fencing are used to enclose a 16 square foot rectangular play area. What must the dimensions be?

2. Find all zeros of the function $f(x) = e^{2x^2 - 5x + 2} - 1$.

3. Suppose $S(t) = 38(1 - e^{-0.75t}) + 62$ models the expected test score of a student who studies for t hours.

(ii) If the student studies for the rest of eternity, what score would this model predict?

⁽i) If the student does not study at all, what score would this model predict?