## MATH 114 QUIZ 5 18 OCTOBER 2016

Solve the following two problems. Show all steps in your work.

(1) Solve the following inequality. Write your answer in interval notation.

$$2x^2 - 5 < x + 10$$

(2) Consider a rectangle with one vertex at the origin, one vertex on the positive x-axis, one vertex on the positive y-axis, and one vertex on the line 2x + y = 6. What is the largest area that such a rectangle could possibly have?