Name:_____ Date:_____

PC: Solving Rational Equations and Inequalities Graphically Review

1. Solve the following equation graphically by doing each of the following:
   (a) Draw a complete graph of the function showing all intercepts and asymptotes.
   (b) Write the window settings you use on your graph.
   (c) Find the solution set

$$\frac{2x-5}{x+1}=\frac{3}{x^2+x}$$

TURN OVER

Solve the following rational inequalities graphically by doing the following:

(a) Draw a complete graph of the function showing all intercepts and asymptotes.
(b) Write the window settings you use on your graph.
(c) **(Optional)** Using your graph, draw a number line with critical points that shows the values of x that satisfy the inequality.
(d) State the solution set using both set builder notation and interval notation.

2. $\frac{x+4}{x+2} \geq \frac{1}{3}$

3. $\frac{2}{x-2} + \frac{5}{x} \leq 7$