Algebra 2 Name: _____

Chapter 8 Review – Extra Problems Date: _____ Period: _____

Simplify Completely.

1.) $\frac{3x^2-48}{x^3-27} \div \frac{6x^3+36x^2+48x}{2x^3-2x^2-12x} \cdot \frac{2x^3+6x^2+18x}{x^3+4x^2-16x-64}$

Solve. Remember to check for extraneous answers.

2.) $\frac{6}{x^2+6x+8} + \frac{(x-1)}{(x+2)} = \frac{5}{x+4}$

3.) Write an equation of a rational equations that has the following information:

- A hole at $x = 2$
- A vertical asymptote at $x = -4$
- A horizontal asymptote at $y = 3$