Activity Exam #2 Review

Name: ———————————————————— Date: ——————————

Instructions: Please complete the following problems for practice.

Problem 1. What is the standard form of a parabola?

Problem 2. Find the standard form of a parabola: $f(x) = 2x^2 + 12x - 1$

Problem 3. Graph: $f(x) = -x(x+3)^4(x-5)^2$ (Use the step process from class.)

Problem 4. What theorem tells you there is a zero between two x-values of a polynomial?

Problem 5. What does the number line test for a polynomial?

Problem 6. Graph: $f(x) = \frac{x^2}{(x-2)(x+7)}$ (Use the step process from class.)

Problem 7. What are the 3 HA rules?

Problem 8. What is the difference between finding domain and VA?

Problem 9. What does the number line test for a rational expression?

Problem 10. What are the 3 ways of finding the remainder?

Problem 11. Condense: $2\log a - 3\log b + 4\log c$

Problem 12. Expand: $\log \frac{\sqrt{ab}}{cd^4}$

Problem 13. Solve: $2^{x-5} = 3^{4x+7}$

Problem 14. Solve by substitution: $2^{2x} - 4 \cdot 2^x = 21$

Problem 15. Solve: $\log(x+8) + \log(x-1) = 1$