Algebra 2 Honors- Week 16 Homework

**Monday-**

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**Tuesday-** Catch up on homework from last week and study for test tomorrow!

# Practice Test for Rational Functions Unit

**Learning Objectives:**

1. Find the quotient of monomials.
2. Simplify expressions with negative exponents.
3. Graph rational functions using transformations.
4. Identify the asymptotes, domain, range and intercepts of a rational function.
5. Model a scenario using rational functions.
6. Simplify rational expressions.
7. Solve an equation with rational coefficients.
8. Solve rational equations.

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| **Question #** | **Learning Objective** | **Know It** | **Feel Unsure** |  | **Right** | **Wrong** | **Simple Mistake** | **Need to Study** |
| 1 | A |  |  |  |  |  |  |  |
| 2 | B |  |  |  |  |  |  |  |
| 3 | C |  |  |  |  |  |  |  |
| 4 | D |  |  |  |  |  |  |  |
| 5 | D |  |  |  |  |  |  |  |
| 6 | E |  |  |  |  |  |  |  |
| 7 | F |  |  |  |  |  |  |  |
| 8 | H |  |  |  |  |  |  |  |
| 9 | I |  |  |  |  |  |  |  |

1. 2. 3. Graph:

4. Identify the domain, range and intercepts of the function in #3.

5. Write a rational function that has no y-intercepts and exists only in the first and second quadrants.

6. To attend a power lifting class, you must pay $100 per year plus $3 per class.

a) What is the average cost per class if you attend 10 classes?

b) What is the average cost per class if you attend 50 classes?

c) Write a function that find the average cost C give classes attended x.

d) What is the domain of this function and what does it say about the scenario?

e) Another power lifting class offers classes for $6 each with no annual fee. Is this a better deal? Explain your

reasoning.

7. Simplify

8. Solve:

9. Solve:

**Wednesday-** Test Day! (No Homework)

**Thursday-**

**Rational Exponents Assignment**

**Simplify.**

1. 2. 3. 4. 5. 6.

**Rewrite in exponential form.**

7. 8. 9. 10.

**Express in simplest radical form.**

11. 12. 13. 14.

15. Determine which two expressions are not equivalent to . Explain how you know.

a) b) c) d) e)

**Friday-**

**Real Number Exponents Assignment**

**Simplify.**

1. 2. 3. 4. 5.

6. 7. 8. 9.

**Solve the equation.**

10. 11. 12. 13.

14. 15. 16. 17.

18.