Advanced Algebra

What are we learning in Unit 8 – Rational Expressions and Functions?

Self-Ratings:

1: I've never seen this topic and wouldn't even know how to begin.

2: I've heard or seen this before, but don't know how to start or complete the problem.

3: I know the topic and can work through the problem but am unsure whether I am correct.

4: I feel confident that I could present my work and solution to the class.

5: I feel that I could correctly teach this topic to another student if asked. Pre-Unit Mid-Unit Post-Unit

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| **Target** | **Examples** | **Date:** | **Date:** | **Date:** |
| **8A.** Classify an equation as direct, inverse, or joint variation | Determine whether the equation represents direct, inverse, or joint variation.1.  2.  |  |  |  |
| **8B.** Create equations to solve direct, inverse, or joint variation problems. | 3. The variable y varies directly with x. If y = 8 when x = 2, find x when y = 5.4. The variable y varies jointly with x and z. If y = 60 when x = 3 and z = 4, find y when x = 6 and z = 8. |  |  |  |
| **8C.** Perform operations and simplify rational expressions. | 5. Simplify: 6. Simplify:  |  |  |  |
| **8D.** Understand the relationship between a rational function and its graph. | Determine the equations of any vertical asymptotes:7.  |  |  |  |
| **8E.** Solve rational equations. | Solve. Check for extraneous solutions.8. $\frac{6}{x-2}=5-\frac{x}{x-2}$ 9. $\frac{4}{x^{2}-8x+12}=\frac{x}{x-2}+\frac{1}{x-6}$ |  |  |  |