Inspiring Greatness

INDEPENDENCE SCHOOL DISTRICT

Math Virtual Learning

Algebra 2/Honors Algebra 2

May 20, 2020

Lesson: May 20, 2020

Objective/Learning Target:
Students will review rational functions.

In the table below, click to review each topic:

Simplifying	Multiplying & Dividing	Adding & Subtracting
Solving	Graphing	

Rational Functions Review:

On a sheet of paper, simplify, solve, or graph the following practice problems.

#1	$\frac{5x+8}{x^2+13x+42}+\frac{16-x}{x^2+13x+42}$
#2	$\frac{6x}{x^2+5x+6}-\frac{5}{x+2}$
#3	$\frac{x+6}{x^2+3x}=\frac{10}{x^2-9}$
#4	Given $y=\frac{1}{x-4}-6$. Identify the following: Asymptotes: _____ Domain: _____ Range: _____

Rational Functions Review Continued:

#5	$\frac{5x}{x^2+8x+16}+\frac{5}{x+4}$
#6	$\frac{4x}{x^2-25}-\frac{3}{x-5}$
#7	$\frac{-2}{x^2-25}=\frac{x+4}{x^2+5x}$
#8	Given $y=\frac{1}{x+8}$. Identify the following: Asymptotes: _____ Domain: _____ Range: _____

Rational Functions Review Answers:

#1 $\frac{4}{x+7}$

#2 $\frac{x-15}{(x+2)(x+3)}$

#3 $x = 9$ and $x = -2$

#4 Asymptotes: $x = 4$ and $y = -6$ Domain: $x \neq 4$ Range: $y \neq -6$

#5 $\frac{10(x+2)}{(x+4)(x+4)}$

#6 $\frac{x-15}{(x-5)(x+5)}$

#7 $x = 4$

#8 Asymptotes: $x = -8$ and $y = 0$ Domain: $x \neq -8$ Range: $y \neq 0$

Additional Practice:

Click on the links below to get additional practice and to check your understanding!

Click on the link: Rational Expressions website

This site gives you examples and a video tutorial over each topic involving rational expressions and functions.