

Names: \_\_\_\_\_

Band: \_\_\_\_\_

Algebra II | Packer Collegiate Institute

Review for Rational Expressions, Circuits, and Rational Equations

1. What is the difference between a rational expression and a rational equation?  
Which type of problem are you allowed to use the “I hate fractions” method – and why can’t you use it in the other problem?

I have **100**  
points. I wager

\_\_\_\_\_.

4. Simplify into a single fraction:  $\frac{5}{x+5} - \frac{2x+5}{x^2+9x+20}$

I now have  
\_\_\_\_\_

points. I wager

\_\_\_\_\_.

2. Draw a circuit with three resistors in parallel. These resistors have resistances of 1 ohm, 2 ohms, and 1/3 ohms. What's the total resistance of the circuit?

I now have

\_\_\_\_\_ points. I wager

\_\_\_\_\_.

5. Solve the equation  $\frac{1}{d-7} + \frac{d}{d-2} = \frac{5}{d^2 - 9d + 14}$ .

I now have

\_\_\_\_\_ points. I wager

\_\_\_\_\_.

3. What is the LCD of the fractions in the equation  $\frac{1}{d-7} + \frac{d}{d-2} = \frac{5}{d^2-9d+14}$ ?

I now have

\_\_\_\_\_ points. I wager

\_\_\_\_\_.

6. A circuit with has two resistors in parallel. One resistor has a resistance of 5 ohms. The second resistor has an unknown resistance. The total resistance is one-fourth times that of the second resistor. What is the total resistance?

I now have

\_\_\_\_\_ points. I wager

\_\_\_\_\_.

**MY TOTAL POINTS:**