NAME:

**Lesson 5.3: Rational Equations**

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This assignment includes multiple choice and short answer questions. For multiple choice questions, select the best answer. Each is worth 1 mark. Marks assigned to short answer questions are indicated for each question. Be sure to show all necessary work.

**/1** 1. The solution to the rational equation  is

1. 
2. 15
3. 18
4. There is no solution because the variables are eliminated.

Answer:

**/1** 2. The solution to the rational equation is

1. 
2. 
3. There is no solution because .
4. There is no solution because .

Answer:

 3. The sum of the reciprocals of two positive consecutive integers is .

 a. Explain what each of the expressions represents in this problem.

**/1** i. *x*

**/1** ii. **

**/1** iii. 

**/1** iv. **

**/1** v. **

**/2** b. Solve the problem. Verify the solution.

**/3** 4. Solve the rational equation . Show all work. Verify the solution(s).

 **/3** 5. Jes makes 4 pizzas on her own in 20 minutes, whereas Kyle, on his own, makes 4 pizzas in

 30 minutes. How long, in minutes, does it take Jes and Kyle to make 20 pizzas when they

 work together?

**/15**

You have completed *Lesson 5.3 Explore Your Understanding Assignment*. Please proceed to the

*Unit 5: Rational Expressions and Equations Final Review Assignment.*