Name

Class

Date



**Practice**

Solving Rational Equations

Solving Rational Equations

**Solve each equation. Check your solutions.**

**1.**  **2.**  **3.** 

**4.**  **5.**  **6.** 

**7.**  **8.**  **9.**

**10.**  **11**.  **12.** 

1. It takes you about an hour to make one batch of cookie dough and your brother about 42 minutes to make one batch. How much time does it take you to make a batch of cookie dough together?
2. Your dad can clean the house in 2 hours and 10 minutes. Your mom can clean it in an hour and 45 minutes. How many hours does it take them to clean the house if they work together?

**Solve each equation. Check your solutions. If there is no solution, write *no solution*.**

**15.**  **16**. 

**17.**  **18.** 

Name

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**Practice** (continued)



Solving Rational Equations

1. It takes you 12 hours to paint a house, your brother 14 hours, and your sister 10 hours. If all three of you work together, how long will it take you to paint the house?
2. Maria, LaShawn, and Mike are all students. It takes Maria 8 hours to write half of her paper for history class. It takes LaShawn 2*x* hours to write one third of her paper, and Mike takes (*x* − 2) hours to write half of his paper. If the teacher tells them they can work on the paper as a group, how long will it take them to complete it?
3. **Error Analysis** Edward solved the rational equation

 and got an answer of *x =* –19. What was his mistake?

1. **Writing** Write a rational equation that has *n* = 10 for the answer. Include at least 3 terms in your equation, one of which should be a quadratic equation or a perfect square.
2. A pool has 2 pipes, one to fill it and one to empty it. Ms. Simon wants to fill the pool, but she mistakenly turns on both pipes at the same time. The pipe that fills the pool can fill it in 6 hours and the one that drains it can do that job in 10 hours. How long will it take to fill the pool now that both pipes are filling and emptying it at the same time?

**24.** What is the LCD of the equation 

**Solve each equation. Check your solutions.**

**25.**  26**.** 