Class

Date

Name



**Practice**

Adding and Subtracting Rational Expressions

**Add or subtract.**

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

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

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

**Find the LCM of each pair of expressions.**

**10.** 6*x*; **11.** 40*x*2*y*2; 8*y*2**12.** 3a – 3; 3

**13.** *z*2 – 4; *z* + 2 **14.** 4*d*2 – 64; 4 **15.** 10*a*2*b*4*c*4; 5*ab*3*c*2

1. Does it matter whether you use the LCD first or the GCF first when adding or subtracting a rational expression with different denominators and simplifying? Use an example to justify your claim.
2. Is there ever a time when it is all right to add or subtract the denominators when adding or subtracting a rational expression? Explain.

**Simplify. Add or subtract.**

**18.**  **19.** 

Name

Class

Date

**Practice** (continued)



Adding and Subtracting Rational Expressions

**Add or subtract.**

**20.**  **21**.  **22.** 

**23.**  **24.**  **25**. 

**26.**  **27.**  **28.** 

**29.** Your friend bought *n +* 8 outfits and her sister bought  outfits. How many total outfits did they buy?

**30.** What is the perimeter of a rectangular garden that is  ft long and  ft wide?

**31.** Your brother ran to school at a rate of 6 mi/h. He walked back home at a rate of 4 mi/h. How far is it to school if the round trip takes 1 hour?

**32.** Adding two rational expressions leads to a solution of  . One expression is . What is the other one? Show your work.

**33. Writing** Explain how to use opposites to find the sum .

**34. Open-Ended** Write a problem that uses addition of rational expressions.