

# Finding Common Denominators

Grade 5 Math • Section 4.1

|             |             |                   |
|-------------|-------------|-------------------|
| Name: _____ | Date: _____ | Score: _____ / 14 |
|-------------|-------------|-------------------|

### Quick Review and Helpful Hints

- ✚ **Common denominator:** A shared multiple of two or more denominators. The **least common denominator (LCD)** is the **least common multiple (LCM)** of the denominators.
- ✚ **Finding the LCD:** List multiples of each denominator until you find the smallest one they share. LCD of 4 and 6: multiples of 4: 4, 8, 12, ...; multiples of 6: 6, 12, ... ⇒ LCD = 12.
- 💡 Rewrite each fraction with the LCD as the new denominator.

🔍 **Example:** Find the LCD of  $\frac{2}{3}$  and  $\frac{5}{8}$ , then rewrite both fractions.

✚ Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24. Multiples of 8: 8, 16, 24. LCD = 24.  $\frac{2}{3} = \frac{16}{24}$  and  $\frac{5}{8} = \frac{15}{24}$ .

💡 **Answer:** LCD = 24;  $\frac{16}{24}$  and  $\frac{15}{24}$

### ✚ Practice Problems

Find the LCD and rewrite each pair of fractions with that denominator.

- |   |  |
|---|--|
| 1. $\frac{1}{4}$ and $\frac{1}{6}$ LCD = _____  | 7. $\frac{7}{12}$ and $\frac{5}{8}$ LCD = _____  |
| 2. $\frac{2}{3}$ and $\frac{3}{5}$ LCD = _____  | 8. $\frac{1}{6}$ and $\frac{4}{9}$ LCD = _____   |
| 3. $\frac{3}{8}$ and $\frac{1}{6}$ LCD = _____  | 9. $\frac{3}{7}$ and $\frac{2}{3}$ LCD = _____   |
| 4. $\frac{5}{12}$ and $\frac{1}{4}$ LCD = _____ | 10. $\frac{5}{6}$ and $\frac{3}{4}$ LCD = _____  |
| 5. $\frac{2}{9}$ and $\frac{1}{3}$ LCD = _____  | 11. $\frac{1}{2}$ and $\frac{3}{8}$ LCD = _____  |
| 6. $\frac{3}{10}$ and $\frac{2}{5}$ LCD = _____ | 12. $\frac{4}{15}$ and $\frac{1}{5}$ LCD = _____ |

### ✚ Word Problems

13. A recipe calls for  $\frac{2}{3}$  cup of flour and  $\frac{3}{4}$  cup of sugar. To add these, you need a common denominator. Find the LCD of 3 and 4 and rewrite both fractions. \_\_\_\_\_
14. Marco ran  $\frac{5}{6}$  of a mile and Tina ran  $\frac{7}{10}$  of a mile. Find the LCD so you can compare who ran farther. \_\_\_\_\_



## Answer Keys

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

### Step-by-Step Explanations

**1.** Start with the main idea. For finding common denominators, list multiples of 4 and 6; the least common multiple is 12. Fractions are easier to combine when the pieces are the same size.

**2.** Keep the work tidy. For finding common denominators, list multiples of 3 and 5; the least common multiple is 15. Always simplify at the end so the answer is clean and useful.

**3.** Look at what the numbers mean. For finding common denominators, list multiples of 8 and 6; the least common multiple is 24. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

**4.** Use the setup first. For finding common denominators, list multiples of 12 and 4; the least common multiple is 12. Fractions are easier to combine when the pieces are the same size.

**5.** Check the size of the answer. For finding common denominators, list multiples of 9 and 3; the least common multiple is 9. Always simplify at the end so the answer is clean and useful.

**6.** Match the operation to the words. For finding common denominators, list multiples of 10 and 5; the least common multiple is 10. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

**7.** Write the important values first. For finding common denominators, list multiples of 12 and 8; the least common multiple is 24. Fractions are easier to combine when the pieces are the same size.

**8.** Follow the pattern carefully. For finding common denominators, list multiples of 6 and 9; the least common multiple is 18. Always simplify at the end so the answer is clean and useful.

**9.** Start with the main idea. For finding common denominators, list multiples of 7 and 3; the least common multiple is 21. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

**10.** Keep the work tidy. For finding common denominators, list multiples of 6 and 4; the least common multiple is 12. Fractions are easier to combine when the pieces are the same size.

**11.** Look at what the numbers mean. For finding common denominators, list multiples of 2 and 8; the least common multiple is 8. Always simplify at the end so the answer is clean and useful.

**12.** Use the setup first. For finding common denominators, list multiples of 15 and 5; the least common multiple is 15. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

**13.** Check the size of the answer. For finding common denominators, the LCD of 3 and 4 is 12, so rewrite  $\frac{2}{3} = \frac{8}{12}$  and  $\frac{3}{4} = \frac{9}{12}$ . Fractions are easier to combine when the pieces are the same size.

**14.** Match the operation to the words. For finding common denominators, the LCD of 6 and 10 is 30; then compare  $\frac{25}{30}$  and  $\frac{21}{30}$ . Always simplify at the end so the answer is clean and useful.



# Want Even More Practice?

Check Out Our Other Ohio OST Test Books!



## Ohio OST Grade 5 Math Preparation Bundle

18 full-length practice tests across three books  
(5 + 6 + 7)

No repeated questions—maximum practice value!



**18 Tests!**  
**3 Books**  
**One Bundle**

**Important:** All our test books contain **unique, completely different tests** from each other! Each book offers fresh practice questions—no repeats!

### 5 Practice Tests

- ✓ 5 complete practice tests with detailed explanations
- ✓ Perfect foundation for OST test preparation
- ✓ Builds confidence and test-taking skills
- ✓ High-quality questions aligned with state standards

**Start your practice journey!**

### 6 Practice Tests

- ✓ 6 complete practice tests with detailed explanations
- ✓ **Unique tests**—different from the 5 tests book
- ✓ Perfect for more practice after mastering 5 tests
- ✓ Builds even more confidence and test-taking skills
- ✓ Same high-quality questions aligned with standards

**Take your practice to the next level!**

### 7 Practice Tests

- ✓ 7 complete practice tests for maximum preparation
- ✓ **Unique tests**—different from 5 and 6 tests books
- ✓ The most comprehensive practice for Grade 5
- ✓ Ideal for students aiming for top scores
- ✓ Extensive practice builds mastery and confidence

**Go all the way with comprehensive practice!**