

# Dividing Mixed Numbers

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_ / 24

## Q Quick Review

Dividing mixed numbers combines two skills you already know. **First, change each mixed number into an improper fraction.** For  $2\frac{1}{2}$ :  $2 \times 2 + 1 = 5$ , so it becomes  $\frac{5}{2}$ . **Then use “keep, change, flip”:** keep the first fraction, change  $\div$  to  $\times$ , and flip the second fraction to its reciprocal. Multiply across, **simplify**, and **convert back** to a mixed number if needed. Doing the conversion first is the key step — never divide the whole parts on their own.

◊ **Example:** Divide  $2\frac{1}{2} \div \frac{3}{4}$ .

⇒ Change the mixed number to an improper fraction: for  $2\frac{1}{2}$ ,  $2 \times 2 + 1 = 5$ , so it is  $\frac{5}{2}$ . Now the problem is  $\frac{5}{2} \div \frac{3}{4}$ . Use “keep, change, flip”: keep  $\frac{5}{2}$ , change to  $\times$ , flip  $\frac{3}{4}$  to  $\frac{4}{3}$ . Multiply:  $\frac{5}{2} \times \frac{4}{3} = \frac{20}{6} = \frac{10}{3}$ . Convert back:  $\frac{10}{3} = 3\frac{1}{3}$ .

**Answer:**  $\frac{10}{3} = 3\frac{1}{3}$

## PRACTICE

Divide. Write each answer in simplest form.

- |                                      |       |                                      |       |
|--------------------------------------|-------|--------------------------------------|-------|
| 1. $2\frac{1}{2} \div \frac{3}{4}$   | _____ | 11. $3\frac{3}{4} \div 1\frac{1}{4}$ | _____ |
| 2. $2\frac{1}{3} \div 1\frac{1}{6}$  | _____ | 12. $2\frac{1}{2} \div 1\frac{1}{4}$ | _____ |
| 3. $2\frac{1}{4} \div 1\frac{1}{2}$  | _____ | 13. $5\frac{1}{2} \div 2\frac{3}{4}$ | _____ |
| 4. $2\frac{1}{5} \div 1\frac{1}{10}$ | _____ | 14. $1\frac{4}{5} \div \frac{3}{5}$  | _____ |
| 5. $2\frac{1}{6} \div \frac{2}{3}$   | _____ | 15. $4\frac{2}{3} \div 1\frac{1}{6}$ | _____ |
| 6. $3\frac{1}{2} \div 1\frac{3}{4}$  | _____ | 16. $3\frac{1}{5} \div \frac{4}{5}$  | _____ |
| 7. $1\frac{1}{2} \div \frac{1}{4}$   | _____ | 17. $2\frac{5}{8} \div 1\frac{3}{4}$ | _____ |
| 8. $3\frac{1}{3} \div 1\frac{2}{3}$  | _____ | 18. $6\frac{1}{4} \div 2\frac{1}{2}$ | _____ |
| 9. $4\frac{1}{2} \div 1\frac{1}{2}$  | _____ | 19. $3\frac{1}{3} \div \frac{5}{6}$  | _____ |
| 10. $2\frac{2}{3} \div \frac{1}{3}$  | _____ | 20. $4\frac{1}{2} \div 1\frac{1}{8}$ | _____ |

## ◆ Word Problems

21. A board is  $2\frac{1}{2}$  feet long. It is cut into  $\frac{3}{4}$ -foot pieces. How many full pieces can be cut, and what fraction of a piece is left over?  
\_\_\_\_\_
22. There are  $3\frac{1}{2}$  pizzas to share equally among groups, with each group getting  $1\frac{3}{4}$  pizzas. How many groups can be served?  
\_\_\_\_\_
23. A pitcher holds  $4\frac{1}{2}$  cups of juice poured into  $1\frac{1}{2}$ -cup glasses. How many glasses can be filled? \_\_\_\_\_
24. A roll of wire is  $3\frac{1}{3}$  meters long. Each project needs  $\frac{5}{6}$  meter. How many projects can be done? \_\_\_\_\_



## Answer Keys

1.  $\frac{10}{3}$

2.  $\frac{2}{1}$

3.  $\frac{3}{2}$

4.  $\frac{2}{1}$

5.  $\frac{13}{4}$

6.  $\frac{2}{1}$

7.  $\frac{6}{1}$

8.  $\frac{2}{1}$

9.  $\frac{3}{1}$

10.  $\frac{8}{1}$

11.  $\frac{3}{1}$

12.  $\frac{2}{1}$

13.  $\frac{2}{1}$

14.  $\frac{3}{1}$

15.  $\frac{4}{1}$

16.  $\frac{4}{1}$

17.  $\frac{3}{2}$

18.  $\frac{5}{2}$

19.  $\frac{4}{1}$

20.  $\frac{4}{1}$

21. 3 full pieces,  $\frac{1}{3}$  left

22. 2 groups

23. 3 glasses

24. 4 projects

### Step-by-Step Explanations

1.  $\frac{5}{2} \times \frac{4}{3} = \frac{20}{6} = \frac{10}{3} = 3\frac{1}{3}$ .

2.  $\frac{7}{3} \times \frac{6}{7} = \frac{42}{21} = 2$ .

3.  $\frac{6}{4} \times \frac{2}{3} = \frac{12}{12} = \frac{3}{2} = 1\frac{1}{2}$ .

4.  $\frac{11}{5} \times \frac{10}{11} = \frac{110}{55} = 2$ .

5.  $\frac{13}{6} \times \frac{3}{2} = \frac{39}{12} = \frac{13}{4} = 3\frac{1}{4}$ .

6.  $\frac{7}{2} \times \frac{4}{7} = \frac{28}{14} = 2$ .

7.  $\frac{3}{2} \times \frac{4}{1} = \frac{12}{2} = 6$ .

8.  $\frac{10}{3} \times \frac{3}{5} = \frac{30}{15} = 2$ .

9.  $\frac{8}{2} \times \frac{3}{2} = \frac{18}{2} = 9$ .

10.  $\frac{8}{3} \times \frac{3}{1} = \frac{24}{3} = 8$ .

11.  $\frac{15}{4} \times \frac{4}{5} = \frac{60}{20} = 3$ .

12.  $\frac{5}{2} \times \frac{4}{5} = \frac{20}{10} = 2$ .

13.  $\frac{11}{2} \times \frac{4}{11} = \frac{44}{22} = 2$ .

14.  $\frac{9}{3} \times \frac{5}{3} = \frac{45}{9} = 5$ .

15.  $\frac{14}{3} \times \frac{6}{7} = \frac{84}{21} = 4$ .

16.  $\frac{16}{5} \times \frac{5}{4} = \frac{80}{20} = 4$ .

17.  $\frac{21}{8} \times \frac{4}{7} = \frac{84}{56} = \frac{3}{2} = 1\frac{1}{2}$ .

18.  $\frac{25}{4} \times \frac{2}{5} = \frac{50}{20} = \frac{5}{2} = 2\frac{1}{2}$ .

19.  $\frac{10}{3} \times \frac{6}{5} = \frac{60}{15} = 4$ .

20.  $\frac{9}{2} \times \frac{8}{9} = \frac{72}{18} = 4$ .

21.  $\frac{3}{2} \div \frac{3}{2} = \frac{10}{3} = 3\frac{1}{3}$ , so 3 full pieces with  $\frac{1}{3}$  of a piece extra.

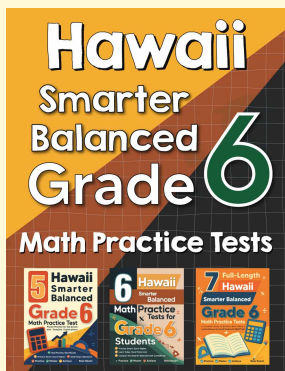
22.  $\frac{7}{2} \div \frac{7}{4} = \frac{7}{2} \times \frac{4}{7} = \frac{28}{14} = 2$  groups.

23.  $\frac{9}{2} \div \frac{3}{2} = \frac{9}{2} \times \frac{2}{3} = \frac{18}{6} = 3$  glasses.

24.  $\frac{10}{3} \div \frac{5}{6} = \frac{10}{3} \times \frac{6}{5} = \frac{60}{15} = 4$  projects.



## Want Even More Practice? Check Out Our Other Hawaii SBAC Test Books!



### Hawaii SBAC Grade 6 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 SBAC 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 6
- ✓ Ideal for students aiming for top scores
- ✓ Extensive practice builds mastery and confidence

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