

Subtracting Fractions with Like Denominators

Name: _____

Date: _____

Score: _____ / 24

Q Quick Review

Subtracting fractions with the **same denominator** works just like adding them, only you take away instead of combine. **Subtract the numerators** (the top numbers) and **keep the denominator the same**. For example, $\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$: five sixths take away two sixths leaves three sixths. The size of the pieces does not change, so the bottom number stays put. When you are done, check whether the answer can be written in **simplest form**. Remember that a whole, like 1, can be written as a fraction such as $\frac{4}{4}$ when you need to subtract from it.

◇ **Example:** Subtract $\frac{7}{8} - \frac{3}{8}$.

⇒ Both fractions are eighths, so the pieces are the same size. Subtract just the numerators: $7 - 3 = 4$. Keep the denominator 8 the same, because the pieces are still eighths. That gives $\frac{4}{8}$. Now simplify: both 4 and 8 divide by 4, so $\frac{4}{8} = \frac{1}{2}$.

Answer: $\frac{1}{2}$

PRACTICE

Subtract each pair of fractions. Write each answer in simplest form.

1. $\frac{3}{4} - \frac{1}{4}$ _____

2. $\frac{4}{5} - \frac{2}{5}$ _____

3. $\frac{5}{6} - \frac{1}{6}$ _____

4. $\frac{7}{8} - \frac{2}{8}$ _____

5. $\frac{9}{10} - \frac{3}{10}$ _____

6. $\frac{2}{3} - \frac{1}{3}$ _____

7. $\frac{5}{8} - \frac{1}{8}$ _____

8. $\frac{11}{12} - \frac{5}{12}$ _____

9. $\frac{4}{6} - \frac{2}{6}$ _____

10. $\frac{7}{10} - \frac{2}{10}$ _____

11. $\frac{3}{5} - \frac{3}{5}$ _____

12. $\frac{5}{12} - \frac{1}{12}$ _____

13. $\frac{7}{8} - \frac{5}{8}$ _____

14. $\frac{5}{6} - \frac{3}{6}$ _____

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

16. $1 - \frac{3}{8}$ _____

17. $1 - \frac{2}{3}$ _____

18. $\frac{80}{100} - \frac{30}{100}$ _____

19. $\frac{11}{12} - \frac{3}{12}$ _____

20. $\frac{9}{10} - \frac{4}{10} - \frac{1}{10}$ _____

◆ Word Problems

21. A pitcher was $\frac{7}{8}$ full of lemonade. After lunch, $\frac{3}{8}$ of the pitcher had been poured out. What fraction of the pitcher is left?

22. Owen had $\frac{5}{6}$ of a chocolate bar. He gave $\frac{1}{6}$ of the bar to a friend. How much of the bar does Owen have now? _____

23. A school garden is one whole plot. So far $\frac{3}{10}$ of it has been planted. What fraction of the garden still needs to be planted?

24. Grace ran $\frac{11}{12}$ of a mile. Her brother ran $\frac{5}{12}$ of a mile. How much farther did Grace run than her brother? _____



Answer Keys

1. $\frac{1}{2}$
2. $\frac{2}{5}$
3. $\frac{2}{3}$
4. $\frac{5}{8}$
5. $\frac{3}{5}$
6. $\frac{1}{3}$
7. $\frac{1}{2}$
8. $\frac{1}{2}$
9. $\frac{1}{3}$
10. $\frac{1}{2}$
11. 0
12. $\frac{1}{3}$

13. $\frac{1}{4}$
14. $\frac{1}{3}$
15. $\frac{3}{4}$
16. $\frac{5}{8}$
17. $\frac{1}{3}$
18. $\frac{1}{2}$
19. $\frac{2}{3}$
20. $\frac{2}{5}$
21. $\frac{1}{2}$
22. $\frac{2}{3}$ of the bar
23. $\frac{7}{10}$ of the garden
24. $\frac{1}{2}$ mile

Step-by-Step Explanations

1. Subtract the tops: $3 - 1 = 2$, giving $\frac{2}{4}$, which simplifies to $\frac{1}{2}$.
2. Subtract the tops: $4 - 2 = 2$. Keep the bottom 5.
3. Subtract the tops: $5 - 1 = 4$, giving $\frac{4}{6}$, which simplifies to $\frac{2}{3}$.
4. Subtract the tops: $7 - 2 = 5$. Keep the bottom 8.
5. Subtract the tops: $9 - 3 = 6$, giving $\frac{6}{10}$, which simplifies to $\frac{3}{5}$.
6. Subtract the tops: $2 - 1 = 1$. Keep the bottom 3.
7. Subtract the tops: $5 - 1 = 4$, giving $\frac{4}{8}$, which simplifies to $\frac{1}{2}$.
8. Subtract the tops: $11 - 5 = 6$, giving $\frac{6}{12}$, which simplifies to $\frac{1}{2}$.
9. Subtract the tops: $4 - 2 = 2$, giving $\frac{2}{6}$, which simplifies to $\frac{1}{3}$.
10. Subtract the tops: $7 - 2 = 5$, giving $\frac{5}{10}$, which simplifies to $\frac{1}{2}$.
11. Subtract the tops: $3 - 3 = 0$. Zero fifths is just 0.
12. Subtract the tops: $5 - 1 = 4$, giving $\frac{4}{12}$, which simplifies to $\frac{1}{3}$.

13. Subtract the tops: $7 - 5 = 2$, giving $\frac{2}{8}$, which simplifies to $\frac{1}{4}$.
14. Subtract the tops: $5 - 3 = 2$, giving $\frac{2}{6}$, which simplifies to $\frac{1}{3}$.
15. Write 1 as $\frac{4}{4}$. Then $\frac{4}{4} - \frac{1}{4} = \frac{3}{4}$.
16. Write 1 as $\frac{4}{4}$. Then $\frac{4}{4} - \frac{1}{4} = \frac{3}{4}$.
17. Write 1 as $\frac{3}{3}$. Then $\frac{3}{3} - \frac{2}{3} = \frac{1}{3}$.
18. Subtract the tops: $80 - 30 = 50$, giving $\frac{50}{100}$, which simplifies to $\frac{1}{2}$.
19. Subtract the tops: $11 - 3 = 8$, giving $\frac{8}{12}$, which simplifies to $\frac{2}{3}$.
20. Work left to right: $9 - 4 - 1 = 4$, giving $\frac{4}{10}$, which simplifies to $\frac{2}{5}$.
21. Subtract the tops: $7 - 3 = 4$, giving $\frac{4}{8}$. Simplify by dividing by 4 to get $\frac{1}{2}$.
22. Subtract the tops: $5 - 1 = 4$, giving $\frac{4}{6}$. Simplify by dividing by 2 to get $\frac{2}{3}$.
23. Write the whole garden as $\frac{10}{10}$. Then $\frac{10}{10} - \frac{3}{10} = \frac{7}{10}$.
24. Subtract the tops: $11 - 5 = 6$, giving $\frac{6}{12}$. Simplify by dividing by 6 to get $\frac{1}{2}$.



Want Even More Practice? Check Out Our Other Pennsylvania PSSA Test Books!



Pennsylvania PSSA Grade 4 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 PSSA 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 4
- ✓ Ideal for students aiming for top scores
- ✓ Extensive practice builds mastery and confidence

Go all the way with comprehensive practice!