



Math Worksheet for 5th Grade

Strategies for adding and subtracting fractions with unlike denominators

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

2. Using fraction strips, place a $\frac{5}{6}$ strip and a $\frac{1}{4}$ strip on the same number line. What is their sum? Show common denominator and answer.
3. Numeracy: Compute $\frac{5}{6} + \frac{1}{4}$. Show work (use a common denominator).
4. Word problem: Maria ate $\frac{5}{6}$ of a chocolate bar. Her friend gave her another $\frac{1}{4}$ of the same size bar. How much chocolate does Maria have now? Give your answer as a mixed number.
5. True/False: $\frac{5}{6} + \frac{1}{4} = \frac{8}{10}$. Explain your answer.
6. Draw two circles (pies). Shade $\frac{5}{6}$ of the first and $\frac{1}{4}$ of the second. Combine the shaded amounts; how much of one whole pie do you have? Write as a mixed number.
7. Fill in the blank: $\frac{5}{6} = ?/12$ and $\frac{1}{4} = ?/12$. Then compute the sum.
8. Which is larger: $\frac{5}{6}$ or $\frac{1}{4}$? Without computing the sum, explain why adding them might give a number greater than 1.
9. Word problem: A recipe needs 1 whole cup of sugar. You already measured $\frac{5}{6}$ cup and then add another $\frac{1}{4}$ cup. Do you have enough sugar? How much extra or short?
10. Multiple choice: $\frac{5}{6} + \frac{1}{4} =$
 - A) $\frac{13}{12}$
 - B) $\frac{11}{12}$
 - C) $\frac{1}{2}$
 - D) $\frac{14}{12}$
11. Visual reasoning: On a bar divided into 12 equal pieces, color $\frac{5}{6}$ in blue and $\frac{1}{4}$ in red. How many pieces are colored in total? Write as fraction and mixed number.
12. Explain step-by-step how to change $\frac{5}{6}$ and $\frac{1}{4}$ to equivalent fractions with denominator 12.
13. Word problem: Liam ran $\frac{5}{6}$ of a mile before taking a break. After the break he ran another $\frac{1}{4}$ mile. How far in total did he run? Give answer as a mixed number and in improper fraction.
14. If $\frac{5}{6} + \frac{1}{4}$ is simplified, what is the improper fraction and what is the mixed number?
15. Fill in: To add fractions with denominators 6 and 4, the least common denominator is _____. Show the equivalent fractions and result.
16. Visual puzzle: You have two identical square tiles. Shade $\frac{5}{6}$ of tile A and $\frac{1}{4}$ of tile B. If you cut and reassemble the shaded parts to make whole tiles, how many whole tiles and leftover pieces do you get?
17. Short answer: Convert $1 \frac{1}{12}$ to an improper fraction.
18. Word problem: A water tank is $\frac{5}{6}$ full. You pour in another $\frac{1}{4}$ of the tank. What fraction of the tank is now full? Does it overflow? If yes, by how much?
19. Show on a number line the points for $\frac{5}{6}$ and $\frac{1}{4}$. Mark their sum on the number line.
20. Mental math: Without drawing, explain why adding $\frac{5}{6}$ and $\frac{1}{4}$ will require converting to twelfths.
21. Make up your own short story problem that models $\frac{5}{6} + \frac{1}{4}$. (Write it out and solve.)
22. Compare two methods: (a) find common denominator 12, (b) convert to decimals and add. Use both to compute $\frac{5}{6} + \frac{1}{4}$ and say which is better for exact fraction answers.

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

23. Fill in the blank: $\frac{5}{6} + \frac{1}{4} = 1 + \frac{\quad}{12}$. What goes in the blank?
24. Word problem: A class planted $\frac{5}{6}$ of a garden bed with flowers and $\frac{1}{4}$ with herbs. What fraction of the bed is planted? Explain how you would draw this.
25. Challenge: If you had three pieces $\frac{1}{4}$, $\frac{1}{4}$, and $\frac{5}{6}$, how many whole units do you have in total? Show as mixed number.
26. Visually subtract: Draw a rectangle divided into 8 equal parts. Shade $\frac{3}{4}$ of it and then cross out $\frac{5}{8}$ of it (from the shaded portion). How much remains shaded? Write the fraction.
27. Using fraction strips, place $\frac{3}{4}$ and $\frac{5}{8}$. Show $\frac{3}{4} - \frac{5}{8}$ and find the difference. Show the common denominator used.
28. Numeracy: Compute $\frac{3}{4} - \frac{5}{8}$. Show steps.
29. Word problem: Jessie drank $\frac{3}{4}$ of a liter of juice. She then spilled $\frac{5}{8}$ liter. How much juice is left? (Assume spillage reduces what she had.)
30. True/False: $\frac{3}{4} - \frac{5}{8} = \frac{1}{4}$. Explain.
31. Draw two identical circles. In the first, shade $\frac{3}{4}$. In the second, shade $\frac{5}{8}$. If you remove the second shaded amount from the first shaded amount, how much remains? Show as a fraction.
32. Fill in the blank: $\frac{3}{4} = \frac{?}{8}$. Then compute $\frac{3}{4} - \frac{5}{8}$.
33. Word problem: A rope is $\frac{3}{4}$ meter long. You cut off $\frac{5}{8}$ meter. How much rope is left? Give answer as a fraction.
34. Explain why using a denominator of 8 makes it easy to subtract $\frac{3}{4} - \frac{5}{8}$.
35. Visual numbering: On a number line, show $\frac{3}{4}$ and $\frac{5}{8}$ and then mark the result of subtraction. What point is that?
36. Which is larger: $\frac{3}{4}$ or $\frac{5}{8}$? By how much?
37. Word problem: A baker used $\frac{3}{4}$ of a bag of flour; another baker returned $\frac{5}{8}$ of a bag back into the cupboard. If you remove the second amount from the first, how much flour is still out?
38. Multiple choice: $\frac{3}{4} - \frac{5}{8} =$
- A) $\frac{1}{8}$
- B) $\frac{2}{8}$
- C) $\frac{1}{4}$
- D) $\frac{3}{8}$
39. Draw a bar divided into 8 parts. Shade $\frac{3}{4}$ and then remove $\frac{5}{8}$. How many parts remain shaded? Write fraction.
40. Short answer: Convert the result of $\frac{3}{4} - \frac{5}{8}$ to a decimal.
41. Word problem: A tank was filled to $\frac{3}{4}$ of capacity. After using some water equal to $\frac{5}{8}$ of the tank, what fraction remains? Is there any left-over negative amount?
42. Fill in: To subtract fractions with denominators 4 and 8, the common denominator is _____. Write the equivalent fractions and the answer.
43. Visual challenge: Use two identical rectangles. Shade $\frac{3}{4}$ of the first. On the second, shade $\frac{5}{8}$. Cut the shaded parts into eighths and remove them; how many eighths remain?
44. Alice says $\frac{3}{4} - \frac{5}{8} = \frac{3}{8}$. Do you agree? Explain and correct if needed.



Math Worksheet for 5th Grade

Strategies for adding and subtracting fractions with unlike denominators

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

45. Word problem: Tim had $\frac{3}{4}$ of a sandwich and gave $\frac{5}{8}$ of it to his dog. How much sandwich does Tim have left?
46. Show work: Start with $\frac{3}{4}$. Take away $\frac{1}{2}$ of $\frac{1}{4}$ (which equals $\frac{1}{8}$). Is this the same as $\frac{3}{4} - \frac{5}{8}$? Explain.
47. Create your own word problem that models $\frac{3}{4} - \frac{5}{8}$, draw a quick picture, and solve.
48. Compare: Which subtraction is bigger: $\frac{3}{4} - \frac{5}{8}$ or $1 - \frac{5}{8}$? Explain without calculating both fully.
49. Fill in the blank: $\frac{3}{4} - \frac{5}{8} = 0 + \frac{\quad}{8}$. What is the blank?
50. Reflection: Explain in 2-3 sentences how you would teach a friend to subtract $\frac{5}{8}$ from $\frac{3}{4}$ using a visual model.