MATH

Adding fractions with unlike denominators

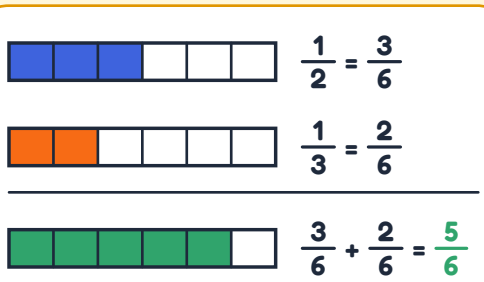


Name _____ Date _____

🎯 **I can add fractions with different denominators.**

1 How it works 💡

You can only add fractions when the bottoms match. Find a common denominator, a number both bottoms divide into. For 1/2 + 1/3, use 6. Rewrite each fraction: 1/2 = 3/6 and 1/3 = 2/6. Now add the tops and keep the bottom: 3/6 + 2/6 = 5/6.



2 Rewrite with the same denominator, then add ✏️

Simplify if you can.

1. $\frac{3}{8} + \frac{1}{2} = \frac{\square}{8} + \frac{\square}{8} = \frac{\square}{\square}$

2. $\frac{1}{9} + \frac{1}{3} = \frac{\square}{9} + \frac{\square}{9} = \frac{\square}{\square}$

3. $\frac{7}{12} + \frac{1}{4} = \frac{\square}{12} + \frac{\square}{12} = \frac{\square}{\square}$

4. $\frac{1}{4} + \frac{1}{3} = \frac{\square}{12} + \frac{\square}{12} = \frac{\square}{\square}$

5. $\frac{1}{2} + \frac{1}{3} = \frac{\square}{6} + \frac{\square}{6} = \frac{\square}{\square}$

6. $\frac{1}{6} + \frac{2}{9} = \frac{\square}{18} + \frac{\square}{18} = \frac{\square}{\square}$

How did I do? ☆ ☆ ☆

Scan for more free practice

MATH · ADDING FRACTIONS WITH UNLIKE DENOMINATORS

Add and simplify

Name _____ Date _____

I can add fractions with different denominators.

1 Add. Write the answer in simplest form.

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

2 Add the mixed numbers

Add the wholes. Add the fractions.

1. $3\frac{1}{4} + 1\frac{1}{8} =$ ☐
2. $1\frac{1}{8} + 3\frac{1}{3} =$ ☐
3. $2\frac{1}{6} + 2\frac{3}{5} =$ ☐
4. $2\frac{5}{8} + 3\frac{1}{6} =$ ☐
5. $2\frac{11}{12} + 2\frac{5}{6} =$ ☐
6. $1\frac{3}{4} + 2\frac{2}{5} =$ ☐

How did I do? ☆ ☆ ☆

Scan for more free practice

MATH · ADDING FRACTIONS WITH UNLIKE DENOMINATORS

Missing fractions and estimating

Name _____ Date _____

I can find a missing fraction and estimate a sum.

1 Find the missing fraction

Write it in simplest form.

1. $\frac{2}{3} + \frac{\square}{\square} = \frac{11}{12}$

2. $\frac{1}{4} + \frac{\square}{\square} = \frac{11}{20}$

3. $\frac{1}{3} + \frac{\square}{\square} = \frac{7}{12}$

4. $\frac{1}{2} + \frac{\square}{\square} = \frac{3}{5}$

2 Is the sum more or less than 1?

Circle more or less.

1. $\frac{1}{5} + \frac{1}{3}$ more less

2. $\frac{7}{9} + \frac{1}{6}$ more less

3. $\frac{4}{5} + \frac{1}{2}$ more less

4. $\frac{2}{3} + \frac{1}{5}$ more less

5. $\frac{3}{10} + \frac{3}{4}$ more less

6. $\frac{3}{4} + \frac{2}{3}$ more less

3 Think about it

1. Ben says 1/2 + 1/3 = 2/5. What did he do wrong?
2. What is the smallest common denominator for 1/4 and 1/6?
3. 1/2 + 1/4 + 1/8 = ?
4. Write two different fractions that add up to 1/2.

How did I do? ☆ ☆ ☆

Scan for more free practice

MATH · ADDING FRACTIONS WITH UNLIKE DENOMINATORS

Word problems

Name _____ Date _____

I can use fractions to solve problems.

1 Read, think, answer

Show your thinking in the box.

1 Ben walked 1/2 mile to the park and then 1/4 mile to the library. How far did Ben walk in all?

Answer: _____



2 A recipe uses 2/3 cup of milk and 1/6 cup of water. How much liquid is that in all?

Answer: _____



3 Aisha spent 3/4 hour on math and 1/2 hour on reading. How long did Aisha work in all?

Answer: _____



4 Ben ate 1/3 of a cake. Aisha ate 1/4 of the same cake. What fraction of the cake did they eat together?

Answer: _____



How did I do? ☆ ☆ ☆

Scan for more free practice

FOR TEACHERS AND PARENTS

Answer key: adding fractions with unlike denominators

1 Page 1

1) 3/8 + 1/2 = 3/8 + 4/8 = 7/8
2) 1/9 + 1/3 = 1/9 + 3/9 = 4/9
3) 7/12 + 1/4 = 7/12 + 3/12 = 10/12 = 5/6
4) 1/4 + 1/3 = 3/12 + 4/12 = 7/12
5) 1/2 + 1/3 = 3/6 + 2/6 = 5/6
6) 1/6 + 2/9 = 3/18 + 4/18 = 7/18

2 Page 2

Sums: 1) 11/12; 2) 1/4; 3) 4/5; 4) 3/4; 5) 11/12; 6) 7/24; 7) 13/14; 8) 7/20; 9) 1 1/20 (21/20); 10) 1 1/6 (7/6); 11) 1 5/14 (19/14); 12) 1 1/10 (11/10).
Mixed numbers: 1) 4 3/8; 2) 4 11/24; 3) 4 23/30; 4) 5 19/24; 5) 5 3/4; 6) 4 3/20.

3 Page 3

Missing fractions: 1) 1/4; 2) 3/10; 3) 1/4; 4) 1/10.
More or less: 1) less (8/15); 2) less (17/18); 3) more (1 3/10); 4) less (13/15); 5) more (1 1/20); 6) more (1 5/12).
Think: 1) He added the tops and the bottoms. The answer is 5/6; 2) 12; 3) 7/8; 4) For example 1/3 + 1/6, or 1/8 + 3/8.

4 Page 4: word problems

1) 2/4 + 1/4 = 3/4 mile
2) 4/6 + 1/6 = 5/6 cup
3) 3/4 + 2/4 = 5/4 = 1 1/4 hours
4) 4/12 + 3/12 = 7/12 of the cake

5 Teaching tip 💡

The most common mistake is adding the tops and the bottoms (1/2 + 1/3 = 2/5). Ask: can a half plus more be less than a half? Fraction strips show the problem fast.

Scan for more free practice