MATH

Subtracting fractions with unlike denominators

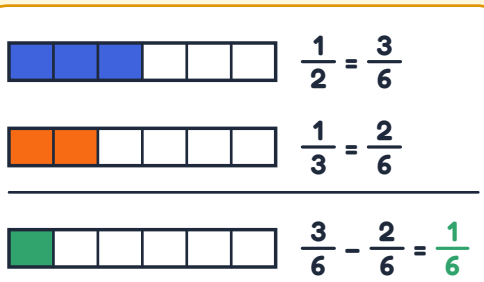


Name _____ Date _____

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

1 How it works 💡

You can only subtract 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 subtract the tops and keep the bottom: 3/6 − 2/6 = 1/6.



2 Rewrite with the same denominator, then subtract

Simplify if you can.

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

2. $\frac{5}{12} - \frac{1}{6} = \frac{\square}{12} - \frac{\square}{12} = \frac{\square}{\square}$

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

4. $\frac{5}{8} - \frac{1}{6} = \frac{\square}{24} - \frac{\square}{24} = \frac{\square}{\square}$

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

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

How did I do? ☆ ☆ ☆

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MATH · SUBTRACTING FRACTIONS WITH UNLIKE DENOMINATORS

Subtract and simplify

Name _____ Date _____

I can subtract fractions with different denominators.

1 Subtract. Write the answer in simplest form.

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

2 Subtract the mixed numbers

You may need to regroup a whole.

1. $5\frac{2}{3} - 3\frac{4}{9} =$ ☐
2. $4\frac{8}{9} - 2\frac{1}{6} =$ ☐
3. $4\frac{5}{6} - 2\frac{2}{3} =$ ☐
4. $2\frac{5}{6} - 2\frac{1}{4} =$ ☐
5. $4\frac{1}{6} - 2\frac{1}{2} =$ ☐
6. $3\frac{3}{4} - 1\frac{7}{8} =$ ☐

How did I do? ☆ ☆ ☆

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Missing fractions and estimating

Name _____ Date _____

I can find a missing fraction and estimate a difference.

1 Find the missing fraction

Write it in simplest form.

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

2. $\frac{\square}{\square} - \frac{1}{4} = \frac{1}{6}$

3. $\frac{9}{10} - \frac{\square}{\square} = \frac{7}{10}$

4. $\frac{\square}{\square} - \frac{1}{6} = \frac{5}{18}$

2 Is the difference more or less than one half?

Circle more or less.

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

2. $\frac{3}{4} - \frac{1}{6}$ more less

3. $\frac{2}{3} - \frac{7}{12}$ more less

4. $\frac{5}{6} - \frac{3}{5}$ more less

5. $\frac{5}{6} - \frac{2}{9}$ more less

6. $\frac{1}{2} - \frac{1}{6}$ more less

3 Think about it

1. Mia says 3/4 − 1/2 = 2/2. What did she do wrong?
2. What is 1 − 3/8?
3. Which is bigger, 2/3 or 3/5? By how much?
4. 1 − 1/2 − 1/4 = ?

How did I do? ☆ ☆ ☆

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Word problems

Name _____ Date _____

I can use fractions to solve problems.

1 Read, think, answer

Show your thinking in the box.

1 A jug holds 3/4 quart of juice. Hana pours out 1/2 quart. How much juice is left in the jug?

Answer:

2 A board is 5/6 yard long. Adam cuts off 1/3 yard. How long is the board now?

Answer:

3 Hana ran 7/8 mile. Adam ran 1/2 mile. How much farther did Hana run?

Answer:

4 A ribbon is 2 1/2 feet long. Adam uses 1 1/4 feet to wrap a gift. How much ribbon is left?

Answer:

How did I do?

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FOR TEACHERS AND PARENTS

Answer key: subtracting fractions with unlike denominators

1 Page 1

1) 3/4 − 1/2 = 3/4 − 2/4 = 1/4
2) 5/12 − 1/6 = 5/12 − 2/12 = 3/12 = 1/4
3) 5/6 − 1/3 = 5/6 − 2/6 = 3/6 = 1/2
4) 5/8 − 1/6 = 15/24 − 4/24 = 11/24
5) 3/4 − 1/3 = 9/12 − 4/12 = 5/12
6) 1/6 − 1/9 = 3/18 − 2/18 = 1/18

2 Page 2

Differences: 1) 1/4; 2) 3/8; 3) 1/6; 4) 1/6; 5) 1/4; 6) 1/5; 7) 1/18; 8) 1/20; 9) 1/20; 10) 1/10; 11) 1/20; 12) 7/30.
Mixed numbers: 1) 2 2/9; 2) 2 13/18; 3) 2 1/6; 4) 7/12; 5) 1 2/3; 6) 1 7/8.

3 Page 3

Missing fractions: 1) 2/3; 2) 5/12; 3) 1/5; 4) 4/9.
More or less: 1) more (11/18); 2) more (7/12); 3) less (1/12); 4) less (7/30); 5) more (11/18); 6) less (1/3).
Think: 1) She subtracted the tops and the bottoms. The answer is 1/4; 2) 5/8; 3) 2/3, by 1/15; 4) 1/4.

4 Page 4: word problems

1) 3/4 − 2/4 = 1/4 quart
2) 5/6 − 2/6 = 3/6 = 1/2 yard
3) 7/8 − 4/8 = 3/8 mile
4) 2 2/4 − 1 1/4 = 1 1/4 feet

5 Teaching tip 💡

For mixed numbers such as 3 1/4 − 1 1/2, let children turn both into improper fractions first. It takes longer than regrouping but leads to fewer mistakes.

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