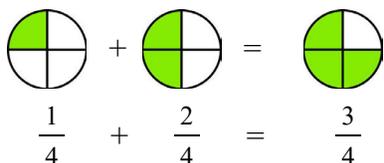
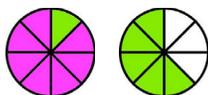


Adding Fractions

It is easy to add fractions that have the same kinds of parts. Study the examples.



Example 1. Here, think of the pie pieces or slices. One fourth means one piece, and two fourths means two pieces. In total we have three pieces, and they all are fourths. So, the answer is $\frac{3}{4}$.



$$\frac{7}{8} + \frac{6}{8} = \frac{13}{8} = 1\frac{5}{8}$$

Example 2. In this picture we have shaded (added) seven slices and then another six slices. All the slices are eighth parts so we can simply count how many eighths we get: 13 eighths or $\frac{13}{8}$.

That makes more than one whole pie, so the answer is given as a mixed number: $1\frac{5}{8}$.

1. Solve. You can shade parts to help you. Give your answer as a mixed number when possible.

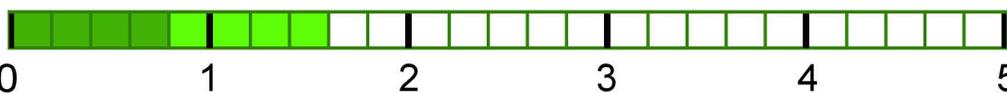
a. $\frac{1}{6} + \frac{3}{6} =$

b. $\frac{2}{8} + \frac{5}{8} =$

c. $\frac{7}{8} + \frac{7}{8} =$ $=$

d. $\frac{7}{10} + \frac{5}{10} =$ $=$

This is a fraction strip:



The shaded parts illustrate the addition $\frac{4}{5} + \frac{4}{5} = \frac{8}{5} = 1\frac{3}{5}$.

2. Add. Shade parts with different colors. Give your answer as a mixed number.



a. $\frac{3}{5} + \frac{4}{5} =$



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



c. $\frac{13}{10} + \frac{6}{10} =$



d. $1\frac{3}{8} + \frac{6}{8} =$

Adding like fractions (fractions that have the same kinds of pieces) is very easy. Think of “slices” or “pie pieces”, add the actual number of slices, and lastly check what *kind* of slices they were.

Example 1. $\frac{6}{11} + \frac{4}{11} = ?$ Simply add $6 + 4 = 10$ to find the total number of slices.

Since the slices are all eleventh parts, the answer is also: $\frac{6}{11} + \frac{4}{11} = \frac{10}{11}$.

Example 2. $\frac{3}{5} + \frac{4}{5} + \frac{1}{5} = \frac{8}{5} = 1\frac{3}{5}$

Here the answer, 8 fifths, is more than one whole, so we give our final answer as a mixed number.

3. Add the fractions. Give your final answer as a whole number or mixed number if possible.

a. $\frac{1}{6} + \frac{1}{6} =$	b. $\frac{1}{4} + \frac{3}{4} =$	c. $\frac{2}{8} + \frac{1}{8} + \frac{4}{8} =$
d. $\frac{1}{5} + \frac{2}{5} + \frac{4}{5} =$	e. $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} =$	
f. $\frac{11}{10} + \frac{7}{10} =$	g. $\frac{3}{4} + \frac{6}{4} + \frac{1}{4} =$	

4. The children divided a chocolate bar into 12 pieces. Then, Mark ate $\frac{3}{12}$ of it, Amy ate $\frac{2}{12}$ of it, and Sam ate $\frac{4}{12}$ of it.

What fraction of the chocolate bar did the children eat?

What fraction of the chocolate bar is left?

5. Add. Use the fraction strips if you need help.

a. $1\frac{3}{5} + \frac{4}{5} =$	
b. $1\frac{7}{8} + \frac{7}{8} =$	
c. $\frac{3}{5} + \frac{4}{5} + \frac{3}{5} =$	

6. Find what is missing from the additions. You can draw pie pictures on blank paper to help you.

a. $\frac{2}{12} + \quad = \frac{11}{12}$	b. $\frac{5}{6} + \quad = 1\frac{2}{6}$	c. $1\frac{5}{8} + \quad = 2\frac{1}{8}$
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