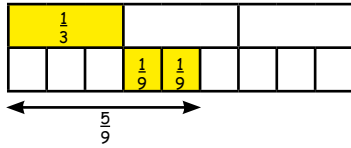


Addition and Subtraction of Fractions with Different Denominators

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



The diagram shows the fractions added together.

$$\frac{1}{3} + \frac{2}{9} = \frac{5}{9}$$

Look at it without the diagram.

To add fractions we need the **denominators** the same. Using equivalent fractions will make them both 9.

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

$$\frac{1}{3} = \frac{3}{9}$$

$$\frac{3}{9} + \frac{2}{9} = \frac{5}{9}$$

Example.

$$\frac{1}{2} + \frac{1}{4} =$$

Make the denominators both 4.

$$\frac{1}{2} + \frac{1}{4} =$$

$$\frac{1}{2} = \frac{2}{4}$$

$$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

Example.

$$\frac{2}{3} - \frac{1}{9} =$$

Make the denominators both 9.

$$\frac{2}{3} - \frac{1}{9} =$$

$$\frac{2}{3} = \frac{6}{9}$$

$$\frac{6}{9} - \frac{1}{9} = \frac{5}{9}$$

Now try our questions.

1). $\frac{1}{2} - \frac{1}{4}$ 2). $\frac{1}{3} - \frac{2}{9}$ 3). $\frac{1}{9} + \frac{2}{3}$ 4). $\frac{3}{4} - \frac{1}{2}$ 5). $\frac{2}{3} + \frac{2}{9}$

6). $\frac{1}{4} + \frac{1}{8}$ 7). $\frac{3}{8} - \frac{1}{4}$ 8). $\frac{1}{3} + \frac{1}{6}$ 9). $\frac{2}{5} - \frac{1}{10}$ 10). $\frac{2}{3} - \frac{1}{6}$

11). $\frac{1}{3} + \frac{5}{12}$ 12). $\frac{3}{4} - \frac{1}{8}$ 13). $\frac{1}{4} + \frac{1}{12}$ 14). $\frac{3}{10} + \frac{2}{5}$ 15). $\frac{7}{8} - \frac{3}{4}$

16). Sally bakes a cake. Her mother eats $\frac{1}{3}$ of the cake and her brother eats $\frac{1}{6}$ of the cake.

How much is left?

17). Ramli buys $\frac{3}{4}$ kg of sugar. He uses $\frac{1}{8}$ kg in a recipe.

How much sugar has he left?

18). Alan has $\frac{7}{9}$ litre of milk in a jug. He drinks $\frac{2}{3}$ litre of the milk.

How many litres of milk does he have left?

19). Amy has $\frac{1}{6}$ kg of rice. She buys $\frac{1}{2}$ kg more of rice.

How many kg of rice does she have in total?

20). Mrs Ram has $\frac{9}{10}$ metre of cloth. She uses $\frac{3}{5}$ metre of cloth for a new dress.

What length of cloth does she have left?

