



THIRD SPACE  
LEARNING



# HELLO!

Today we are going to learn to  
add and subtract fractions

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

## Warm up for adding and subtracting fractions

Complete the pairs of equivalent fractions

1.

$$\frac{2}{5} = \frac{\boxed{\phantom{000}}}{20}$$

2.

$$\frac{3}{8} = \frac{9}{\boxed{\phantom{000}}}$$

3.

$$\frac{28}{40} = \frac{\boxed{\phantom{000}}}{10}$$

Complete these calculations.

4.

$$\frac{3}{5} + \frac{1}{5} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$

5.

$$\frac{6}{7} - \frac{5}{7} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$

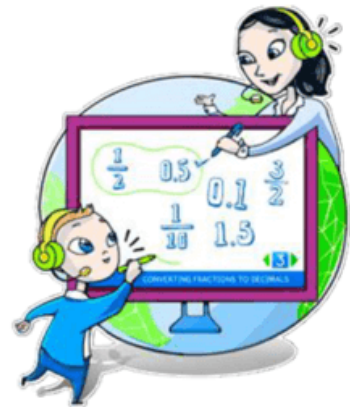
6.

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$



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# Add and subtract fractions



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**In this session, we are going to learn:**



to add and subtract fractions where one **denominator** is a **factor** of the other

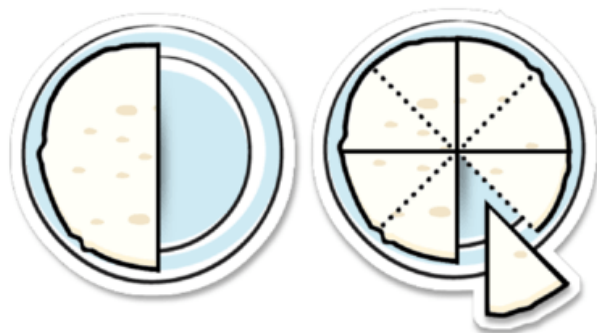


to add and subtract fractions where the denominators are the same and the answer is greater than 1

## Adding fractions

Aaron has  $\frac{1}{2}$  of a tortilla and Ali has  $\frac{1}{8}$  of a tortilla.

What fraction of a tortilla do they have altogether?

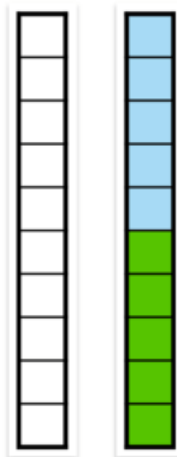


Write the calculation for this problem.

$$\frac{1}{2} + \frac{1}{8} = \frac{\boxed{\phantom{000}}}{8} + \frac{1}{8} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$

## Adding fractions

What is  $\frac{3}{10}$  more than  $\frac{1}{2}$  ?



Write the addition for this problem.



Rewrite the addition using an equivalent fraction so both fractions have the same denominator, then find the answer.

$$\begin{array}{c} \square \\ \hline \square \end{array} + \begin{array}{c} \square \\ \hline \square \end{array} = \begin{array}{c} \square \\ \hline \square \end{array} + \begin{array}{c} \square \\ \hline \square \end{array} = \begin{array}{c} \square \\ \hline \square \end{array}$$

## Adding fractions



Rewrite each addition using an equivalent fraction so both fractions have the same denominator. Then find the answer.

1.

$$\frac{1}{2} + \frac{1}{4} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} + \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

2.

$$\frac{3}{8} + \frac{1}{2} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} + \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

3.

$$\frac{1}{3} + \frac{2}{9} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} + \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

4.

$$\frac{3}{10} + \frac{4}{5} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} + \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

Check your answers by imagining or drawing pictures.

## Subtracting fractions



Lani has  $\frac{1}{2}$  of a papadum. She gives  $\frac{1}{10}$

of her papadum to her friend. What fraction of a papadum does she have left?

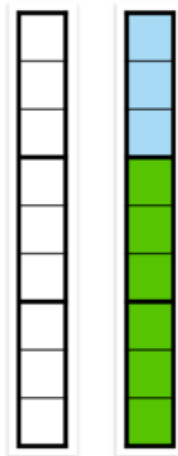


Rewrite the subtraction using an equivalent fraction for  $\frac{1}{2}$  so both fractions have the same denominator, then find the answer.

$$\frac{1}{2} - \frac{1}{10} = \frac{\boxed{\phantom{00}}}{10} - \frac{1}{10} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

## Subtracting fractions

By how much is  $\frac{8}{9}$  bigger than  $\frac{2}{3}$  ?



Write the calculation so both fractions have the same denominator.  
Then write the answer.

$$\begin{array}{c} \square \\ \hline \square \end{array} - \begin{array}{c} \square \\ \hline \square \end{array} = \begin{array}{c} \square \\ \hline \square \end{array} - \begin{array}{c} \square \\ \hline \square \end{array} = \begin{array}{c} \square \\ \hline \square \end{array}$$



## Subtracting fractions



Write each question so the fractions have the same denominator.  
Then write the answer.

1.

$$\frac{1}{2} - \frac{1}{4} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} - \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

2.

$$\frac{7}{8} - \frac{1}{2} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} - \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

3.

$$\frac{2}{3} - \frac{2}{9} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} - \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

4.

$$\frac{9}{10} - \frac{2}{5} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} - \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

Check your answers by imagining or drawing pictures.

## Adding fractions where the answer is greater than 1

1.

$$\frac{4}{5} + \frac{2}{5} = \boxed{\quad \underline{\quad}}$$

2.

$$\frac{3}{10} + \frac{9}{10} + \frac{1}{10} = \boxed{\quad \underline{\quad}}$$



Write these questions so the fractions have the same denominator.  
Then write the answer.

3.

$$\frac{2}{3} + \frac{4}{9} = \frac{\boxed{\quad}}{\boxed{\quad}} + \frac{\boxed{\quad}}{\boxed{\quad}} = \boxed{\quad \underline{\quad}}$$

4.

$$\frac{9}{10} + \frac{2}{5} = \frac{\boxed{\quad}}{\boxed{\quad}} + \frac{\boxed{\quad}}{\boxed{\quad}} = \boxed{\quad \underline{\quad}}$$

## Subtracting fractions where the answer is greater than 1

1.  $1\frac{4}{5} - \frac{1}{5} = \boxed{\quad}$

2.  $2\frac{3}{10} - 1\frac{2}{10} = \boxed{\quad}$



Write these questions so the fractions have the same denominator.  
Then write the answer.

3.  $1\frac{2}{3} - \frac{2}{9} = \boxed{\quad} - \frac{\boxed{\quad}}{\boxed{\quad}} = \boxed{\quad}$

4.  $5\frac{9}{10} - 1\frac{2}{5} = \boxed{\quad} - \boxed{\quad} = \boxed{\quad}$

## Practice time



Write each question so the fractions have the same denominator.

Then write the answer.

1.

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

2.

$$\frac{3}{8} + \frac{3}{4} = \frac{\square}{\square} + \frac{\square}{\square} = \square$$

3.

$$\frac{9}{10} - \frac{1}{5} = \frac{\square}{\square} - \frac{\square}{\square} = \frac{\square}{\square}$$

4.

$$1\frac{1}{8} - \frac{1}{4} = \frac{\square}{\square} - \frac{\square}{\square} = \square$$

## Practice time

5. Sally has three quarters of a pizza. She eats one eighth of a pizza. How much pizza is left?



# Adding and subtracting fractions

What do you think you were good at doing today?

