

22/1/21

Subtracting Fractions

In Focus

What fraction of the pizza was left?



How many pieces are there altogether?

How many pieces are left?

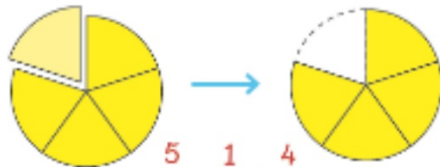
This is the same as 1 whole

Let's Learn

1 The pizza was cut into 5 equal slices.

Sam ate $\frac{1}{5}$ of the pizza.

Subtract $\frac{1}{5}$ from $\frac{5}{5}$.



$$\frac{5}{5} - \frac{1}{5} = \frac{4}{5}$$

$\frac{4}{5}$ of the pizza was left.

5 fifths - 1 fifth
= 4 fifths



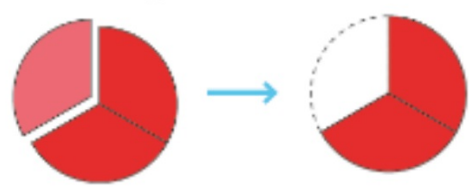
$$1 = \frac{5}{5}$$

This is what is left over

1 whole pizza

1 piece was eaten

2 Subtract $\frac{1}{3}$ from 1.



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

3 thirds - 1 third
= 2 thirds



Remember: 1 whole here would be 3 parts.

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

Watch video clip "Explanation 1"



3 $1 - \frac{1}{4} =$



$$1 - \frac{1}{4} = \frac{4}{4} - \frac{1}{4}$$
$$= \frac{\quad}{4}$$

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

1 = 4 quarters

4 quarters - 1 quarter
= quarters



Remember: 1 whole here would be 4 parts.

$$\frac{4}{4} - \frac{1}{4} = \frac{?}{4}$$

Guided Practice

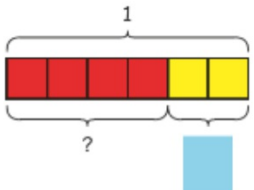
Subtract.

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



2 $1 - \frac{4}{7} = \square$



3  $1 - \frac{2}{6} = \square - \frac{2}{6}$
 $= \square$

4 (a) $1 - \frac{3}{4} = \square$

(b) $1 - \frac{3}{5} = \square$

Which is greater,
 $\frac{1}{4}$ or $\frac{2}{5}$?



Watch video clip "Explanation 2"



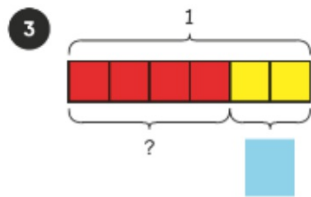
Guided Practice

Subtract.

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



2 $1 - \frac{4}{7} =$

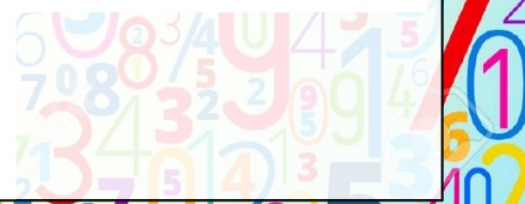


$$1 - \frac{2}{6} = \text{} - \frac{2}{6}$$
$$= \text{}$$

4 (a) $1 - \frac{3}{4} =$

(b) $1 - \frac{3}{5} =$

Which is greater,
 $\frac{1}{4}$ or $\frac{2}{5}$?



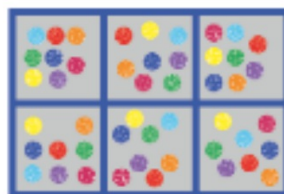
Adding Fractions

In Focus



Charles

I took $\frac{1}{6}$ of the sweets in the box.



Ruby

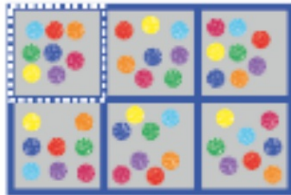
I took $\frac{3}{6}$ of the sweets in the box.

What **fraction** of the sweets did Charles and Ruby take altogether?

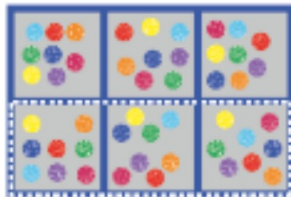
We are looking for the fraction of sweets, not the number of sweets.

Let's Learn

1



$\frac{1}{6}$



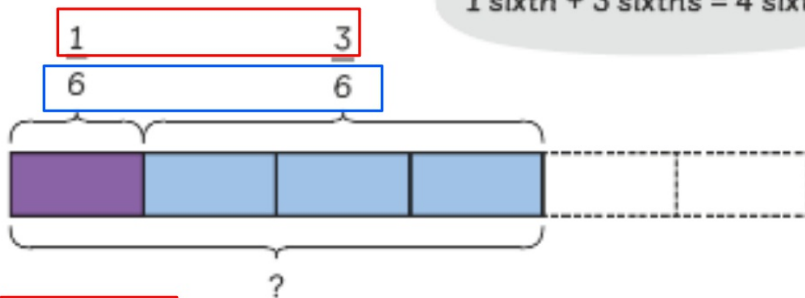
$\frac{3}{6}$

1 sixth + 3 sixths = 4 sixths

$$\frac{1}{6} + \frac{3}{6} = \frac{4}{6}$$

Charles and Ruby took $\frac{4}{6}$ of the sweets.

2 Add $\frac{1}{6}$ and $\frac{3}{6}$.

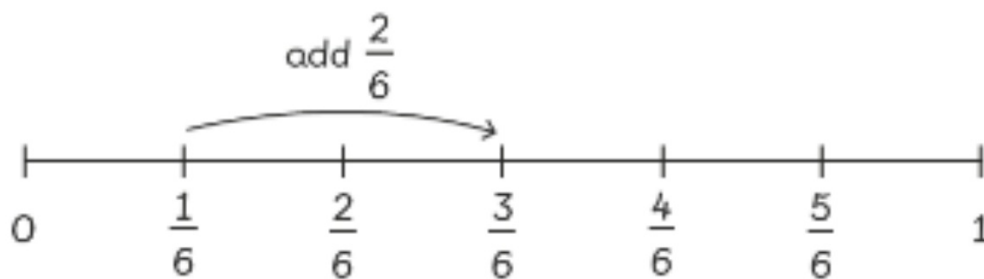
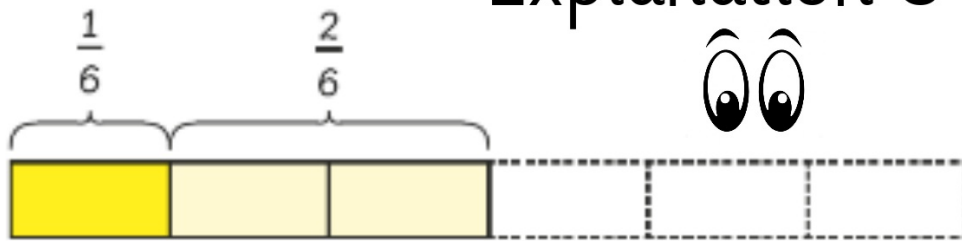


$$\begin{array}{r} 1 + 3 + 4 \\ 6 + 6 + 6 \end{array}$$

There are 6 parts altogether (denominator)
The parts we are looking at here are the numerators.

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

Watch video clip
"Explanation 3"



Guided Practice

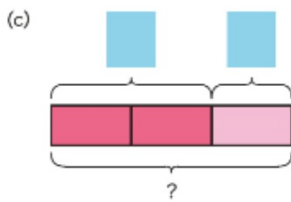
1 Add.



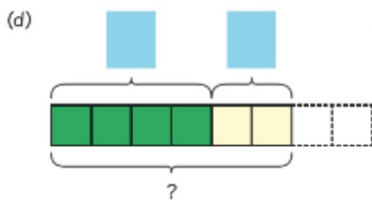
$\frac{1}{7} + \frac{5}{7} = \square$



$\frac{1}{6} + \frac{4}{6} = \square$



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



$\frac{4}{8} + \frac{2}{8} = \square$

2 Add.

(a) $\frac{2}{9} + \frac{3}{9} = \square$

(b) $\frac{2}{5} + \frac{3}{5} = \square$

(c) $\frac{1}{6} + \frac{3}{6} = \square$

Watch video clip "Explanation 4"

$\frac{4}{6} = \frac{2}{3}$



Is the sum in the simplest form?



Subtracting Fractions

1 Subtract and fill in the blanks.

$$(a) \quad 1 - \frac{1}{3} = \square - \square$$
$$= \square$$

$$(b) \quad 1 - \frac{5}{9} = \square - \square$$
$$= \square$$

2 Subtract and write each fraction in its simplest form.

$$(a) \quad 1 - \frac{1}{5} = \square$$

$$(b) \quad 1 - \frac{5}{12} = \square$$

$$(c) \quad 1 - \frac{2}{9} = \square$$

$$(d) \quad 1 - \frac{2}{11} = \square$$

$$(e) \quad 1 - \frac{6}{7} = \square$$

$$(f) \quad 1 - \frac{3}{10} = \square$$

Adding Fractions

1 Add and fill in the blanks. Write each fraction in its simplest form. Shade the bars to help you.

$$(a) \quad \frac{4}{9} + \frac{2}{9} = \square$$

$$= \square$$

$$(b) \quad \frac{3}{8} + \frac{2}{8} = \square$$

$$= \square$$

2 Add and write each fraction in its simplest form.

$$(a) \quad \frac{2}{3} + \frac{1}{3} = \square$$

$$(b) \quad \frac{7}{12} + \frac{1}{12} = \square$$

$$(c) \quad \frac{2}{8} + \frac{2}{8} = \square$$

$$(d) \quad \frac{2}{6} + \frac{2}{6} = \square$$

Complete the worksheets.

Going Deeper

Challenge! Find equivalent fractions for each of those diagrams. You could make the parts smaller or larger.

Comparing Fractions

1 Compare the fractions and fill in the blanks. Shade the bars to help you.

(a) $\frac{1}{3}$

$\frac{2}{3}$

is greater than .

(b) $\frac{2}{6}$

$\frac{5}{6}$

is greater than .

(c) $\frac{7}{11}$

$\frac{9}{11}$

is smaller than .