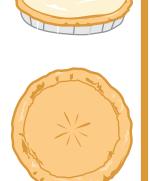
SELLING FRACTIONS

Mona is selling her pies at the school bake sale. She has 2 different types of pies, apple and lemon meringue. She has 4 of each pie.



\$12 for a whole Lemon Meringue Pie

\$7 1/2 Lemon Meringue Pie bushel of strawberries

\$2 1/8 (a slice) Lemon Meringue Pie

\$10 for a whole Apple Pie

\$6 1/2 a Apple Pie

\$1 1/8 (a slice) Apple Pie





Carol loves Mona's pies. She buys a whole Lemon Meringue pie and a pie and a 3/4 of the Apple Pie. \$12 = whole lemon meringue of an apple pie+ 2 slices to make 3/4 of an apple pie

How much money did she pay?

Brett loves apples so he buys 5/8 of an apple pie.

\$7 = 1/2 apple pie + 1 slice to make 5/8 of an apple pie

How much money did he pay?

Lulu can only afford 2 slices of each pie.
(2 x \$2 lemon pie slice) + (2 x \$1 apple pie slice)

How much money did she pay?_

Timothy likes apples but his parents want the lemon meringue pie. To compromise he buys a whole apple pie for himself and 3/4 of the lemon meringue pie for his parents. \$10 = whole apple pie

How much money did he pay?

In total how much money did Mona make? \$54

How many apple pies are left over? $\frac{1}{8}$ or a whole pie and 3 slices

How many lemon meringue pies are left?

2 pies are left

STRAWBERRY FRACTIONS

Amy is selling her strawberries at her fruit stand in the local farmer's market. She starts the day with 11 ½ bushels of strawberries.



Ellen needs 4 ¾ bushels for her bakery.

How many bushels are left? $6^{\frac{3}{4}}$

How much money did she pay? ___\$15.25

Billy came to buy 1 1/4 bushel.

How many bushels are left? $\underline{}$

How much money did he pay?____\$4.25

Todd and his family came to buy $2\frac{3}{8}$ bushels.

How many bushels are left? $3\frac{1}{8}$

How much money did they pay? \$8

Jack wants to buy ½ bushel but could only afford 3/8 of a bushel.

How many bushels does Amy have left?

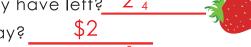
How much money did he pay?

How many bushels were sold today?

How much money was made today?











Answer Key

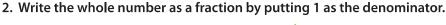
Fraction Word Problems

Multiplying With Whole Numbers

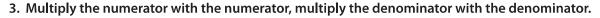
When you multiply a fraction with a whole number, first you must write the multiplication equation.

Example: Tammy drank $\frac{2}{3}$ gallon of lemonade. Susie drank 3 times more. How much did Susie drink?

1. Write multiplication equation. $\frac{2}{3}$ x 3



$$3 = \frac{3}{1} \leftarrow \frac{\text{numerator}}{\text{denominator}}$$



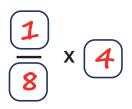
$$\frac{2}{3} \times \frac{3}{1} = \frac{2 \times 3}{3 \times 1} = \frac{6}{3}$$



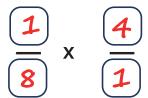
Solve the word problems by multiplying fractions.

Rose ate $\frac{1}{8}$ of the soup in the pot. Kristi ate 4 times more that Rose did. How much soup did Kristi have?

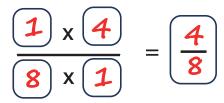
1. Write multiplication equation.



2. Write the whole number as a fraction by putting 1 as the denominator.



3. Multiply the numerator with numerator, multiply denominator with denominator.



Jenn has 20 skirts. She donated $\frac{4}{5}$ of them. How much did she give away?



Jenn gave away 16 shirts.

A nswer Key

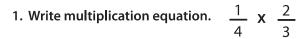


Fraction Word Problems

Multiplying Fractions with Fractions

When you multiply a fraction with a fraction in a word problem, first, you must write the multiplication equation.

Example: $\frac{1}{4}$ of Jasper's marbles are green. $\frac{2}{3}$ of his green marbles were given to him by his brother. What fraction of Jasper's marbles are green marbles given to him by his brother?





$$\frac{1}{4} \times \frac{2}{3} \xleftarrow{\text{numerator}} = \frac{1 \times 2}{4 \times 3} = \frac{2}{12}$$

$$= \frac{1 \times 2}{4 \times 3} = \frac{2}{12}$$



Solve the word problems by multiplying fractions.

 $\frac{2}{5}$ of Ashley's fruit are strawberries. $\frac{1}{4}$ of the strawberries are chocolate covered.

What fraction of Ashley's fruit are chocolate-covered strawberries?

1. Write the multiplication equation.

$$\frac{2}{5}$$
 x $\frac{1}{4}$

2. Multiply the numerator with the numerator, multiply the denominator with the denominator.

$$\frac{2 \times 1}{5 \times 4} = \frac{2}{20}$$

 $\frac{2}{3}$ of Mark's tea is white tea. $\frac{1}{2}$ of Mark's white tea was bought from England.

What fraction of Mark's tea came from England?

 $\frac{1}{3}$ of Mark's tea is white tea from England.



Fraction Word Problems:

Adding with Unlike Denominators

When you add fractions with unlike denominators, first you need to make the denominators equal.

Example:

$$\frac{1}{3} + \frac{1}{2} \leftarrow \frac{numerator}{denominator}$$

- 1. Multiply each fraction by the other fraction's denominator.
- Multiply both the numerator and the denominator of $\frac{1}{3}$ by 2. $\frac{1}{3}$ x $\frac{2}{2} = \frac{2}{6}$ denominator Notice that now the denominator is equal to 6. (Remember: any number over itself is equal to 1! Since we multiplied by the equivalent of 1, $\frac{1}{3}$ is equal to $\frac{2}{6}$.)
- Multiply both the numerator and the denominator of $\frac{1}{2}$ by 3. $\frac{1}{2}$ x $\frac{3}{3}$ = $\frac{3}{6}$ \leftarrow denominator
- 2. Now you have $\frac{2}{6}$ and $\frac{3}{6}$. Add them together. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$

Solve the word problems by adding fractions.

- Mr. Snail walked $\frac{1}{\epsilon}$ mile in the morning and $\frac{2}{\tau}$ mile in the evening. How many miles did he walk in total?
 - 1. Multiply each fraction by the other fraction's denominator.



Multiply
$$\frac{1}{6}$$
 by $\frac{7}{7}$. $\frac{1}{6}$ x $\frac{7}{7}$ = $\frac{7}{42}$ Multiply $\frac{2}{7}$ by $\frac{6}{6}$. $\frac{2}{7}$ x $\frac{6}{6}$ =

Multiply
$$\frac{2}{7}$$
 by $\frac{6}{6}$. $\frac{2}{7}$ x $\frac{6}{6}$ = $\frac{12}{42}$

2. Now you get
$$\sqrt{\frac{7}{42}}$$
 and $\sqrt{\frac{12}{42}}$

3. Add them together.
$$\left(\frac{7}{42}\right) + \left(\frac{12}{42}\right) = \left(\frac{19}{42}\right)$$

Read the question below and use another piece of paper to find the answer. Show your work.



Mr. Snail weighs $\frac{2}{5}$ pound and Ms. Butterfly weighs $\frac{3}{8}$ pound. How much do they weigh together?

Together, they weigh $\frac{31}{40}$ pound.



Fraction Word Problems:

Subtracting with Unlike Denominators

When you subtract fractions with unlike denominators, first you need to make the denominators equal. Example:

$$\frac{3}{4} - \frac{1}{5} \leftarrow \frac{numerator}{denominator}$$

- 1. Multiply each fraction by the other fraction's denominator.
- Multiply both the numerator and the denominator of $\frac{1}{5}$ by 4. $\frac{1}{5}$ $\times \frac{4}{4} = \frac{4}{20}$ denominator
- 2. Now you have $\frac{15}{20}$ and $\frac{4}{20}$. Subtract them. $\frac{15}{20} \frac{4}{20} = \frac{11}{20}$



Solve the word problems by subtracting fractions.

The puppy is $\frac{5}{6}$ of a foot tall and the kitten is $\frac{2}{5}$ of a foot tall. How much taller is the puppy than the kitten?

1. Multiply each fraction by the other fraction's denominator.



Multiply
$$\frac{5}{6}$$
 by $\frac{5}{5}$. $\frac{5}{6}$ x $\frac{5}{5}$ = $\frac{25}{30}$ Multiply $\frac{2}{5}$ by $\frac{6}{6}$. $\frac{2}{5}$ x $\frac{6}{6}$ = $\frac{12}{30}$

2. Now you have $25 \over 30$ and $12 \over 30$ 3. Subtract them. $25 \over 30$ $- 12 \over 30$ $= 13 \over 30$

Read the question below and use another piece of paper to find the answer. Show your work.

The puppy ate $\frac{3}{4}$ of a carton of milk and the kitten ate $\frac{5}{7}$ of a carton of milk.

How much more did the puppy eat? The puppy drank $\frac{1}{28}$ more milk than the kitten.