Fun with Fractions 5th Grade

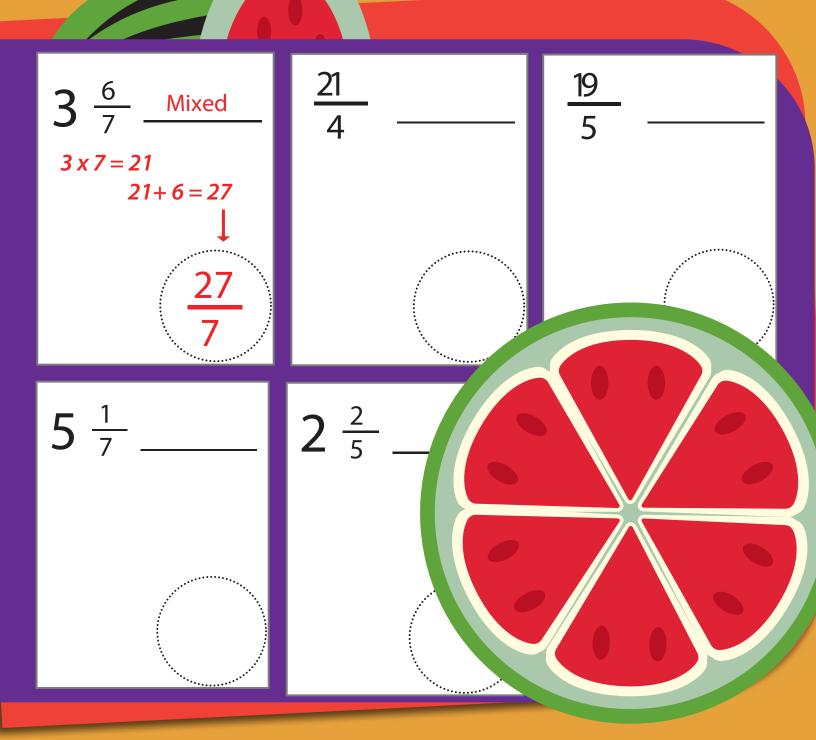




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ADDING MIXED FRACTIONS

Practice your fraction arithmetic skills by adding the following mixed fractions. Be sure to show your work and simplify your answers.

$$1\frac{2}{5} + 3\frac{6}{7} = 5\frac{9}{35} = \frac{5\frac{9}{35}}{\frac{7}{35} + \frac{7}{5}} + \frac{3}{35} + \frac{6}{35} + \frac{27}{5} + \frac{27}{7} + \frac{27}{5} + \frac{27}{5} + \frac{135}{35} = \frac{184}{35}$$

$$3\frac{1}{4} + 4\frac{1}{2} =$$
 $2\frac{5}{6} + 5\frac{4}{7} =$

$$2\frac{3}{5} + 6\frac{1}{4} = - 4\frac{2}{3} + 4\frac{1}{6} = - 6$$

$$7\frac{3}{4} + 1\frac{1}{3} = 3\frac{1}{2} + 3\frac{1}{5} = - 6$$

Rewrite as improper

fractions

Find least common denominator

 $\frac{184}{35} = 5 \frac{9}{35}$

ADDING MIXED FRACTIONS

Practice your fraction arithmetic skills by adding the following mixed fractions. Be sure to show your work and simplify your answers.

$$3\frac{1}{6} + 2\frac{3}{5} = 5\frac{23}{30}$$

$$3^{++}_{\times} 1^{-+}_{19} + 2^{++}_{\times}_{\times}_{-}_{13}$$
Rewrite as
improper
fractions

Find least
common
denominator

$$\frac{95}{30} + \frac{78}{30} = \frac{173}{30} = 5\frac{23}{30}$$

$$\begin{array}{c}
\mathbf{6} \frac{3}{7} + \mathbf{1} \frac{2}{5} = \\
\mathbf{3} \frac{4}{5} + \mathbf{4} \frac{1}{3} = \\
\mathbf{6} \frac{1}{2} + \mathbf{4} \frac{2}{3} = \\
\end{array}$$

$$\begin{array}{c}
\mathbf{1} \frac{3}{4} + \mathbf{6} \frac{6}{7} = \\
\mathbf{2} \frac{2}{7} + \mathbf{3} \frac{5}{6} = \\
\mathbf{2} \frac{2}{7} + \mathbf{3} \frac{5}{6} = \\
\end{array}$$

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ADDING MIXED FRACTIONS

Practice your fraction arithmetic skills by adding the following mixed fractions. Be sure to show your work and simplify your answers.

$$1\frac{2}{3} + 4\frac{1}{7} = 5\frac{17}{21}$$

$$\frac{1 + 2^{-5} + 4^{++1} - 29}{\frac{5}{2} + 7} + 29 + 3}{\frac{5}{3} + 7} + 29 + 3}$$

$$\frac{1 + 2^{-5} + 4^{++1} - 29}{\frac{5}{2} + 7} + 29 + 3}{\frac{5}{2} + 7} + 29 + 3}$$

$$\frac{35}{21} + \frac{87}{21} = \frac{122}{21} = 5\frac{17}{21}$$

$$3\frac{3}{7} + 2\frac{1}{6} =$$

$$3\frac{1}{4} + 4\frac{4}{5} =$$

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

$$2\frac{1}{3} + 6\frac{3}{5} =$$

$$6\frac{3}{4} + 1\frac{6}{7} =$$

$$2\frac{3}{7} + 2\frac{1}{6} =$$

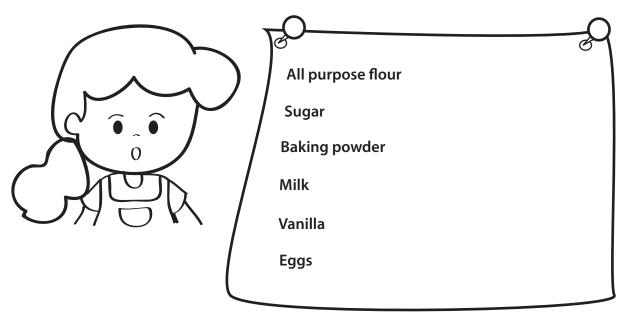
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Aunt Marie needs help figuring out how much of each ingredient she will need to buy in order to make this cupcake recipe. Can you help her?

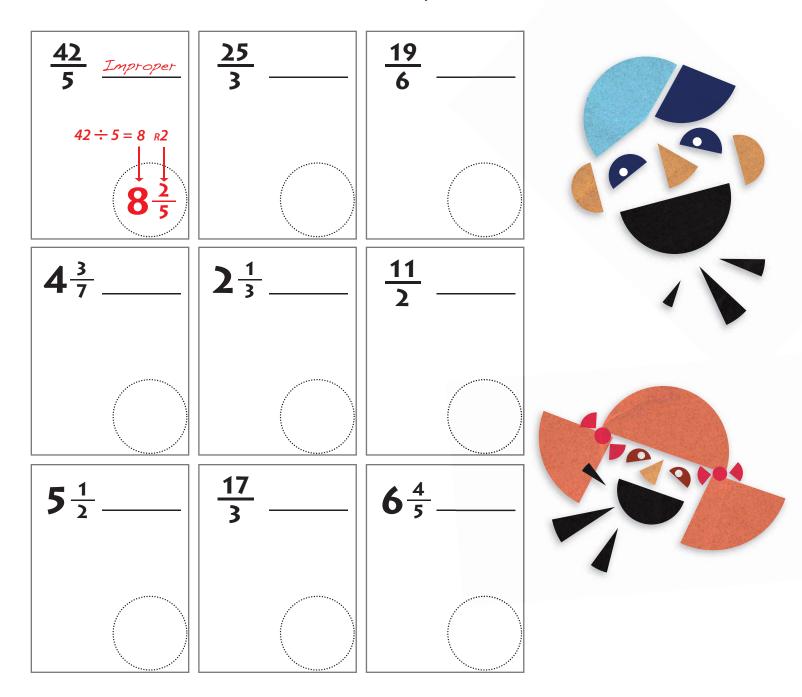
Recipe		G	³ She has		She needs
All purpose flour	$4\frac{1}{3}$	cups	<u>2</u> 3	cup	
Sugar	3 <u>3</u> 4	cups	<u>6</u> 8	cup	
Baking powder	4	teaspoons	<u>6</u> 5	teaspoons	
Milk	2	cups	1 <u>1</u> 6	cups	
Vanilla	6	teaspoons	2 <u>3</u> 6	teaspoons	
Eggs	2		0		04

More challenge!

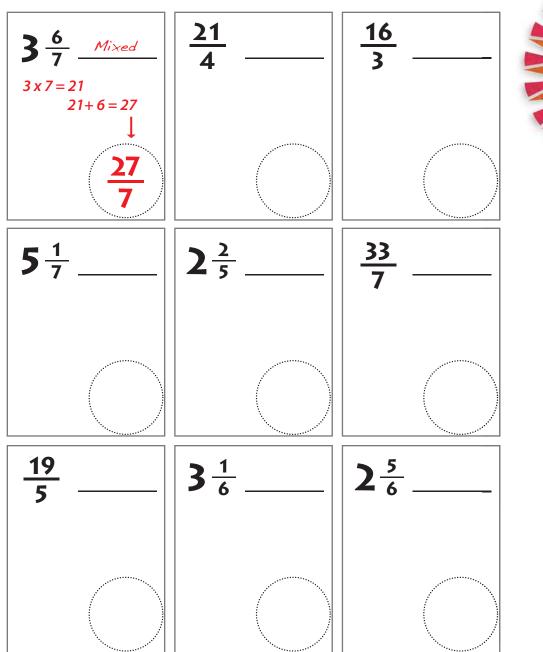
This recipe is for 12 people. If Aunt Marie wanted to cut the recipe in half, how much of each ingredient would it call for?







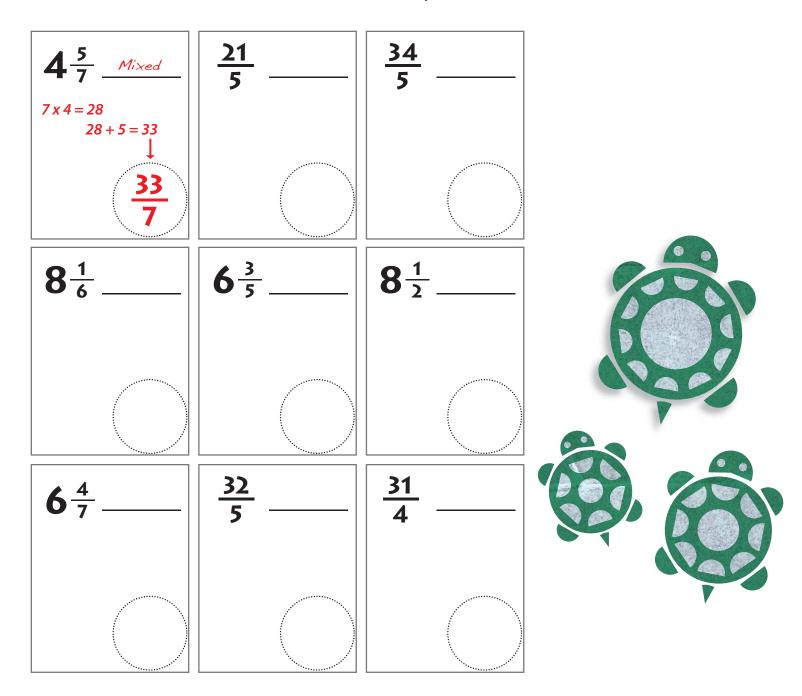








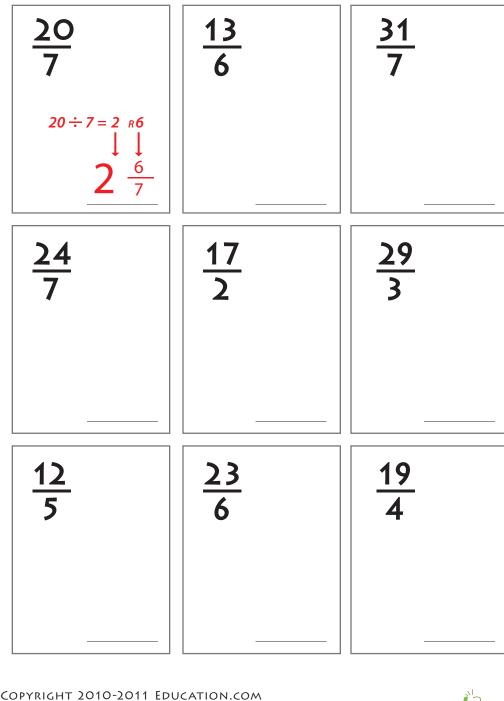




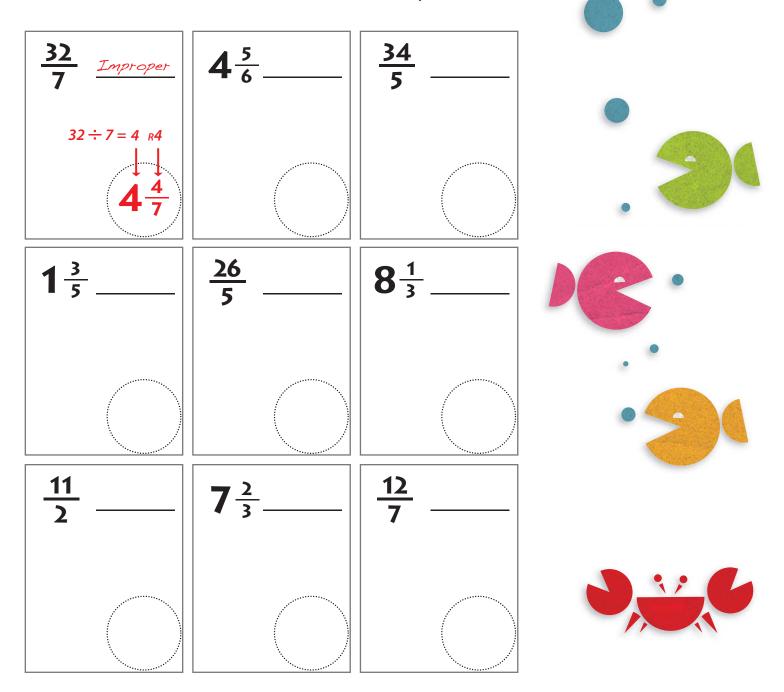




Practice your fraction skills by rewriting the following improper fractions as mixed fractions. Be sure to show your work.







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.



Carol loves Mona's pies. She buys a whole Lemon Meringue pie and 3/4 of an Apple Pie.

How much money did she pay?

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

How much money did he pay?

Lulu can only afford 2 slices of each pie.

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.

How much money did he pay?___

In total how much money did Mona make?_____

How many apple pies are left over?_____

How many lemon meringue 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.

 A standard of strawberries
Ellen needs 4 ¾ bushels for her bakery.
How many bushels are left?
How much money did she pay?
Billy came to buy 1 ¼ bushels.
How many bushels are left?
How much money did he pay?
Todd and his family came to buy $2\frac{3}{8}$ bushels.
How many bushels are left?
How much money did they pay?
Jack wants to buy $\frac{1}{2}$ a 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?

Fraction Word Problems Multiplying With Whole Numbers

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

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

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

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

$$3 = \frac{3}{1} \xleftarrow{\text{numerator}} 1 \xleftarrow{\text{numerator}}$$

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

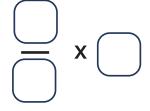
2	x	3	_	2 x 3	_	6
3	Λ	1		3 x 1	_	3

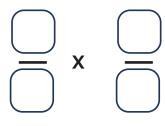
Solve the word problems by multiplying fractions.

Rose ate $\frac{1}{2}$ of the soup in the pot. Kristi ate 4 times more that Rose did. How much soup did Kristi have?

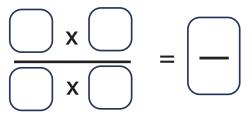
1. Write multiplication equation.

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?







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?
- 1. Write multiplication equation. $\frac{1}{4} \times \frac{2}{3}$
- 2. Multiply the numerator with numerator, multiply denominator with denominator.

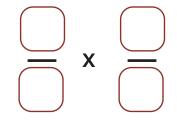
$\frac{1}{\mathbf{x}}$	2	\leftarrow numerator	_	1 x 2	_	2
4	-	← denominator		4 x 3		12

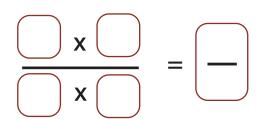
Solve the word problems by multiplying fractions.

 $\frac{2}{5}$ 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.
- 2. Multiply the numerator with the numerator, multiply the denominator with the denominator.





 $\frac{2}{3}$ 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?

Math Fractions Fraction Word Problems: Adding with Unlike Denominators

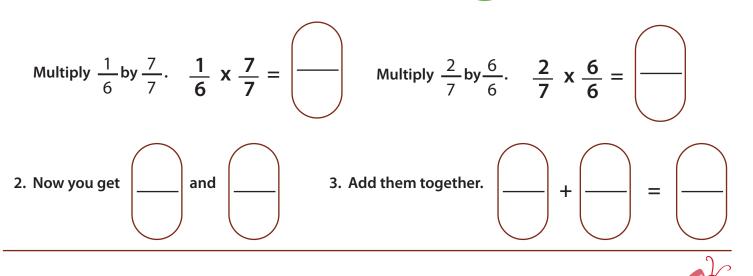
When you add fractions with unlike denominators, first you need to make the denominators equal. Example: $\frac{1}{3} + \frac{1}{2} \leftarrow \frac{numerator}{denominator}$

- 1. Multiply each fraction by the other fraction's denominator.
- Multiply both the numerator and the denominator of ¹/₃ by 2. ¹/₃ x ²/₂ = 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, ¹/₃ is equal to ²/₆.)
 Multiply both the numerator and the denominator of ¹/₁ by 3. ¹/₃ x ³/₂ = ³/₆
- Multiply both the numerator and the denominator of $\frac{1}{2}$ by 3. $\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$ denominator Notice that now the denominator is equal to 6.
- 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 $\frac{1}{6}$ mile in the morning and $\frac{2}{7}$ mile in the evening. How many miles did he walk in total?

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



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?

Fractions 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 $\frac{3}{4}$ by 5. $\frac{3}{4} \times \frac{5}{5} = \frac{15}{20}$ \leftarrow denominator (Remember: any number over itself is equal to 1! Since we multiplied

by the equivalent of 1, $\frac{3}{4}$ is equal to $\frac{15}{20}$.)

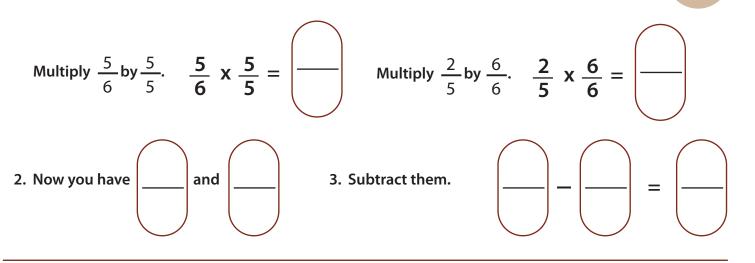
• Multiply both the numerator and the denominator of $\frac{1}{5}$ by 4. $\frac{1}{5}$ x $\frac{4}{4} = \frac{4}{20}$ denominator Notice that now the denominator is equal to 20.

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.



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?

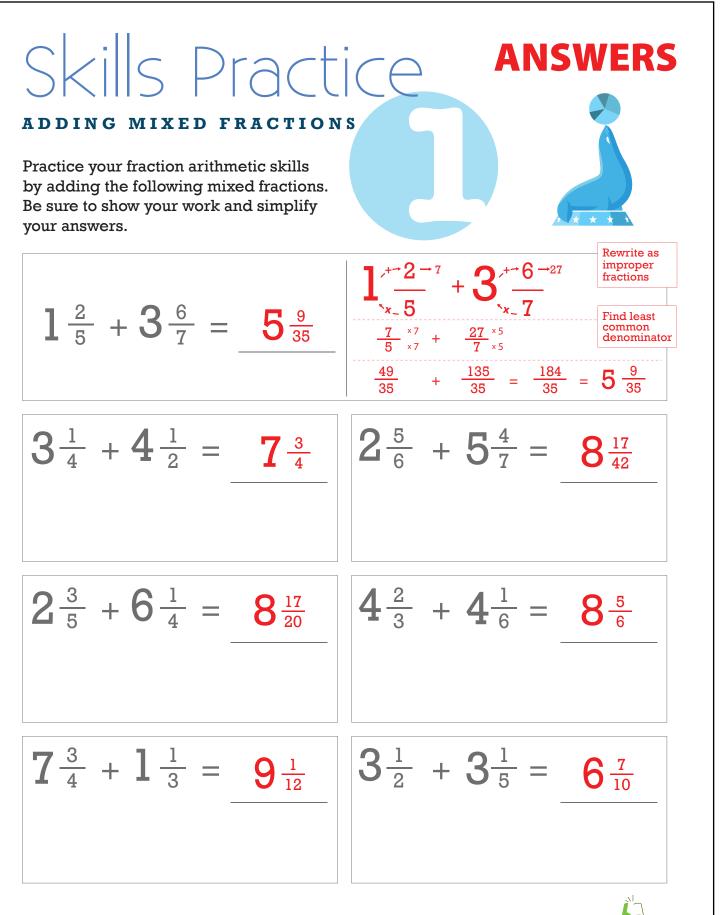


Fun with Fractions

Skills Practice: Adding Mixed Fractions #1 Skills Practice: Adding Mixed Fractions #2 Skills Practice: Adding Mixed Fractions #3 Cupcakes Challenge: Practice Fractions Skills Practice: Mixed and Improper Fractions #1 Skills Practice: Mixed and Improper Fractions #2 Skills Practice: Mixed and Improper Fractions #3 Skills Practice: Mixed and Improper Fractions #3 Skills Practice: Mixed and Improper Fractions #4 Skills Practice: Mixed and Improper Fractions #4 Selling Fractions Strawberry Fractions Fraction Word Problems: Multiplying With Whole Numbers

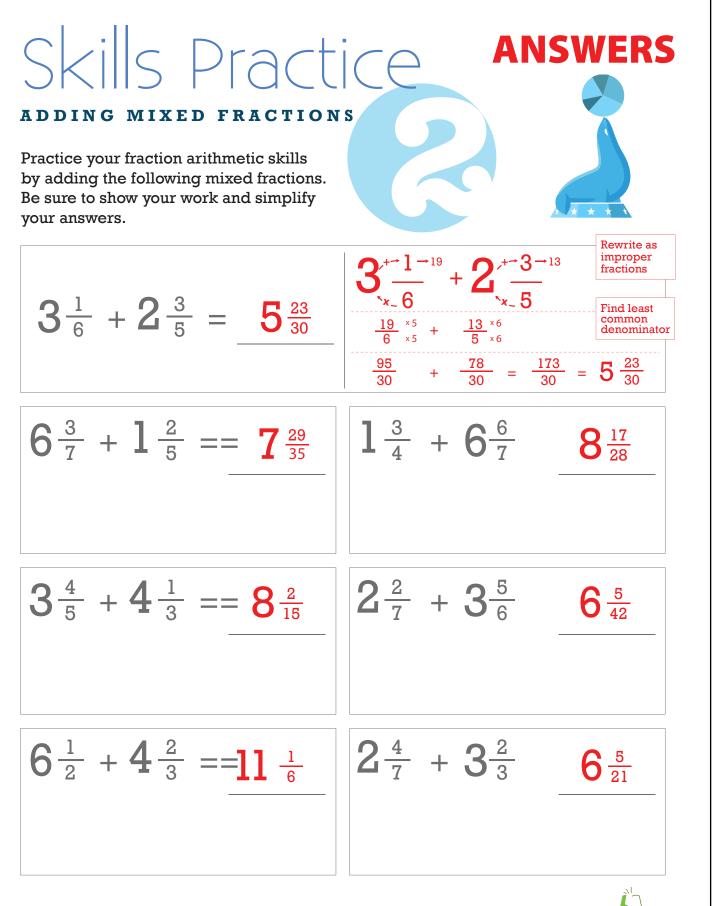
Fraction Word Problems: Multiplying With Whole Rumbers Fraction Word Problems: Multiplying Fractions with Fractions Fraction Word Problems: Adding with Unlike Denominators Fraction Word Problems: Subtracting with Unlike Denominators

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ADDING MIXED FRACTIONS

Practice your fraction arithmetic skills by adding the following mixed fractions. Be sure to show your work and simplify your answers.

 $\frac{2}{2}$ + 4^{+1} - $\frac{1}{2}$ $1\frac{2}{3} + 4\frac{1}{7} = 5\frac{17}{21}$ Find least common $\frac{5}{3}$ $\times 7$ + $\frac{29}{7}$ $\times 3$ denominator $+ \frac{87}{21} = \frac{122}{21} = 5\frac{17}{21}$ $3\frac{1}{4} + 4\frac{4}{5} = 8\frac{1}{20}$ $3\frac{3}{7} + 2\frac{1}{6} = 5\frac{25}{42}$ $2\frac{1}{3} + 6\frac{3}{5} = 8\frac{14}{15}$ $5\frac{2}{5} + 4\frac{1}{2} = 9\frac{9}{10}$ $2\frac{3}{7} + 2\frac{1}{6} = 4\frac{25}{42}$ $6\frac{3}{4} + 1\frac{6}{7} = 8\frac{17}{28}$

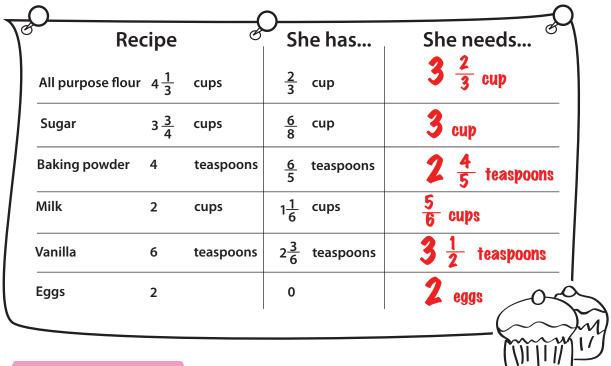
ANSWERS

Rewrite as improper

fractions

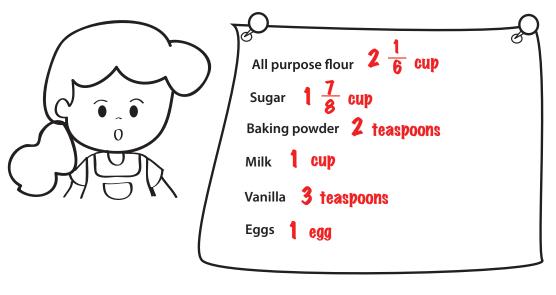
Cupcakes Challenge: Practice Fractions

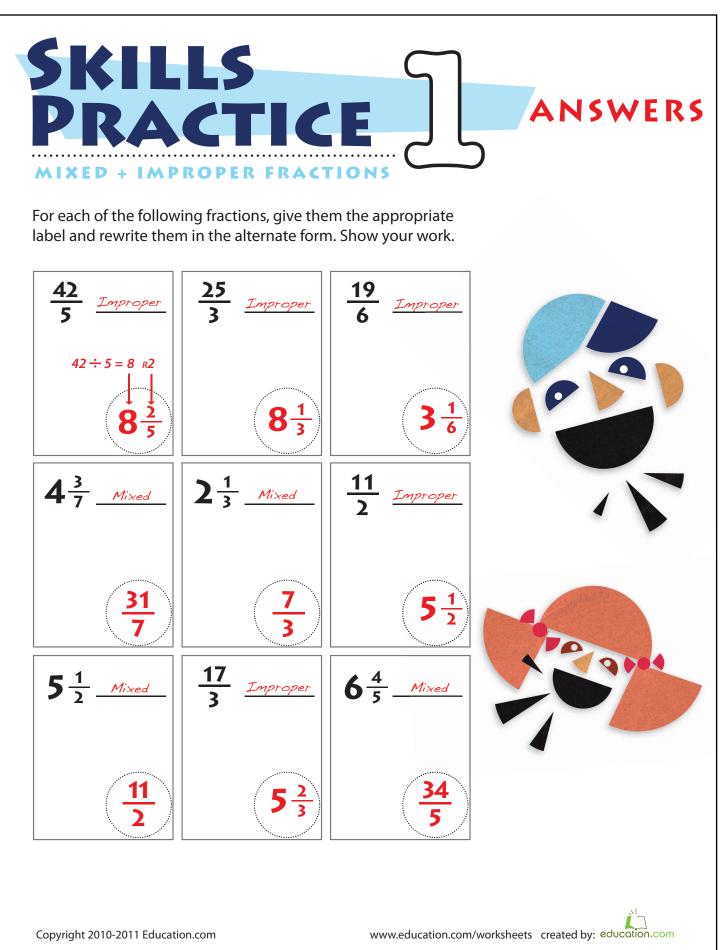
Aunt Marie needs help figuring out how much of each ingredient she will need to buy in order to make this cupcake recipe. Can you help her?

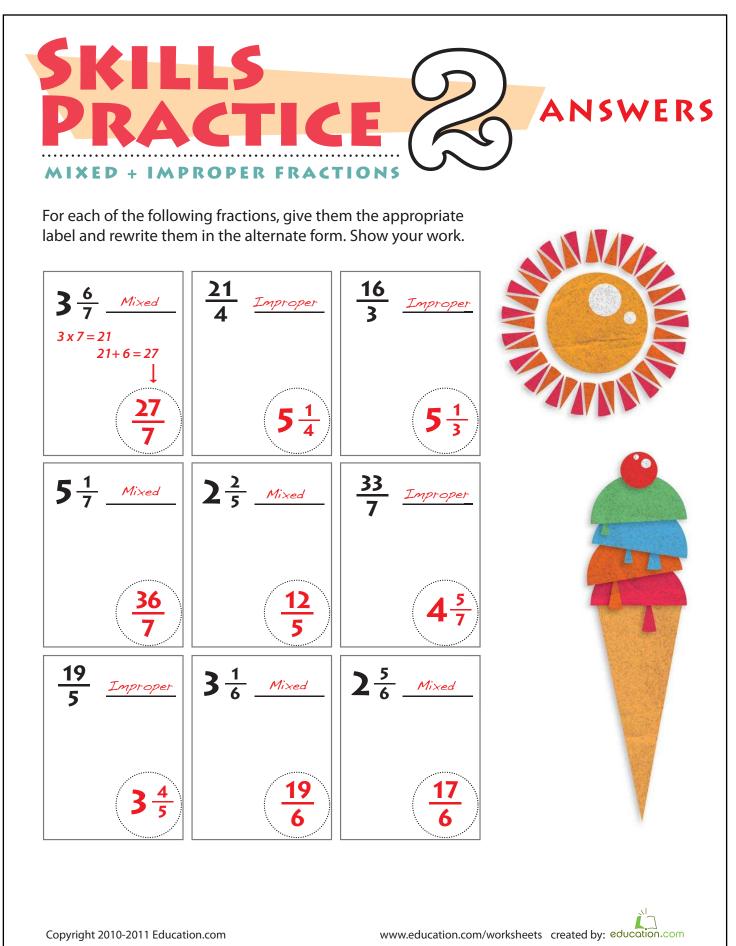


More challenge!

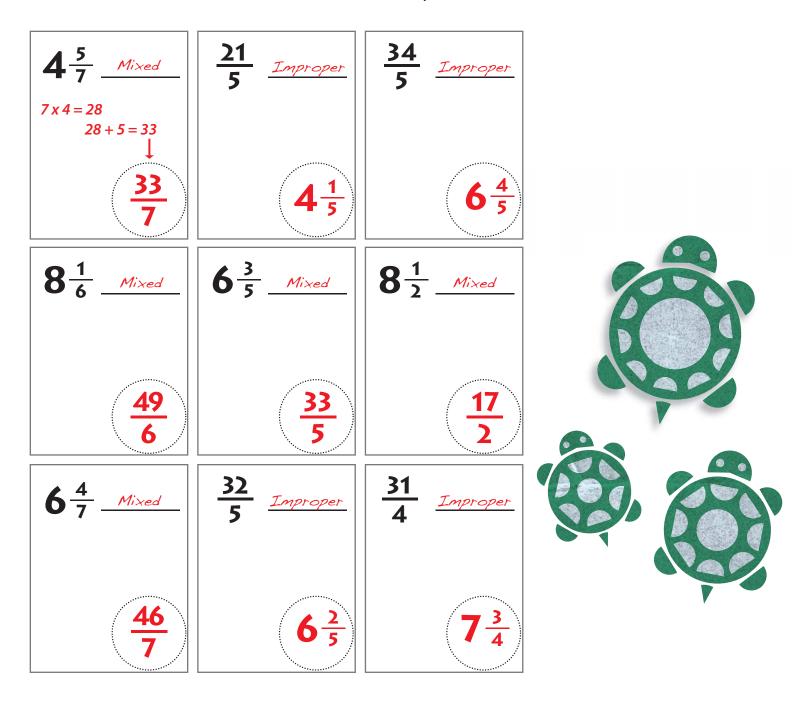
This recipe is for 12 people. If Aunt Marie wanted to cut the recipe in half, how much of each ingredient would it call for?

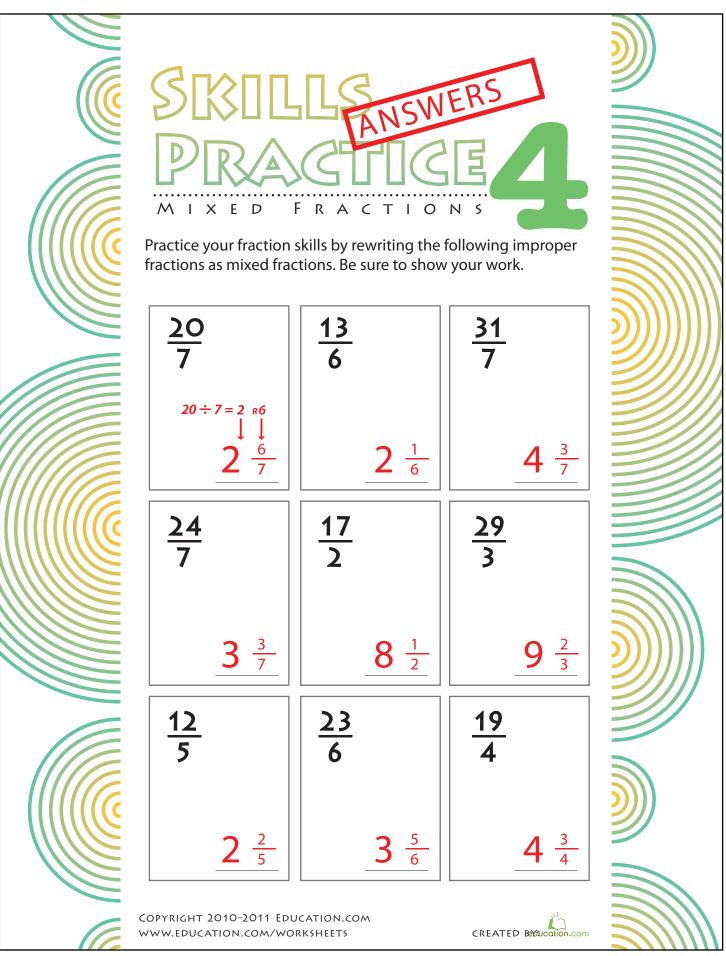


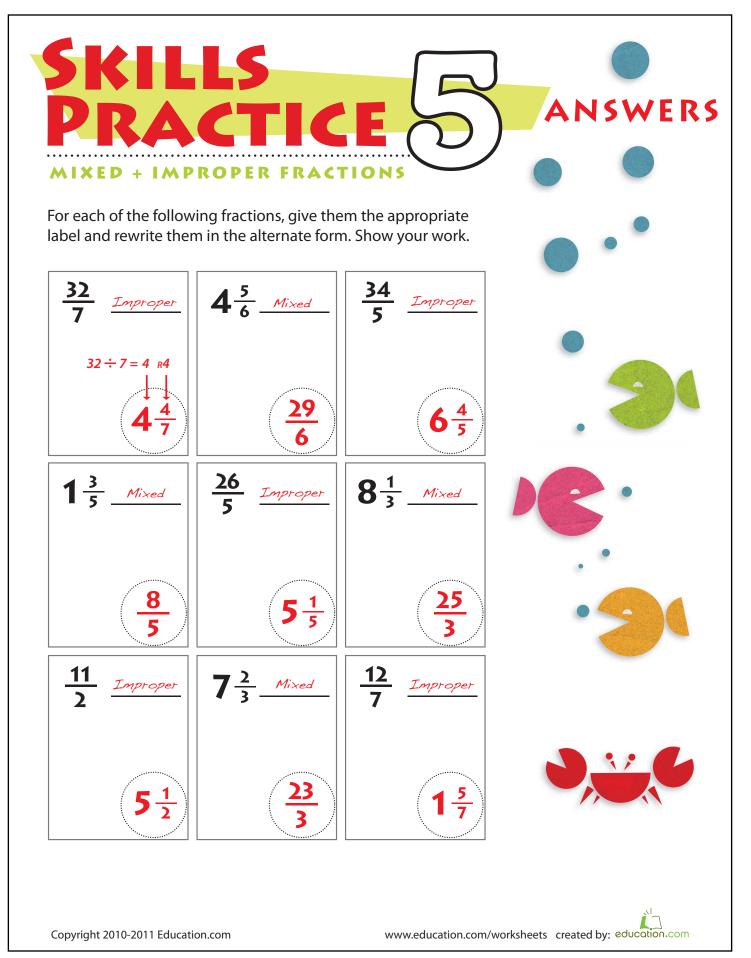












SELLING FRACTIONS

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.

prices \$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 \$12 = and a 3/4 of the Apple Pie. \$12 = whole lemon meringue \$13 = 1/2 an apple pie + 2 slices to make 3/4 of an apple pie How much money did she pay? \$20 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? \$7 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? \$6 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 \$10 = whole apple pie 3/4 of a lemon meringue pie How much money did he pay? \$21 In total how much money did Mona make? \$54 How many apple pies are left over? $1\frac{3}{8}$ or a whole pie and 3 slices How many lemon meringue pies are left? 2 pies are left More worksheets at www.education.com/worksheets

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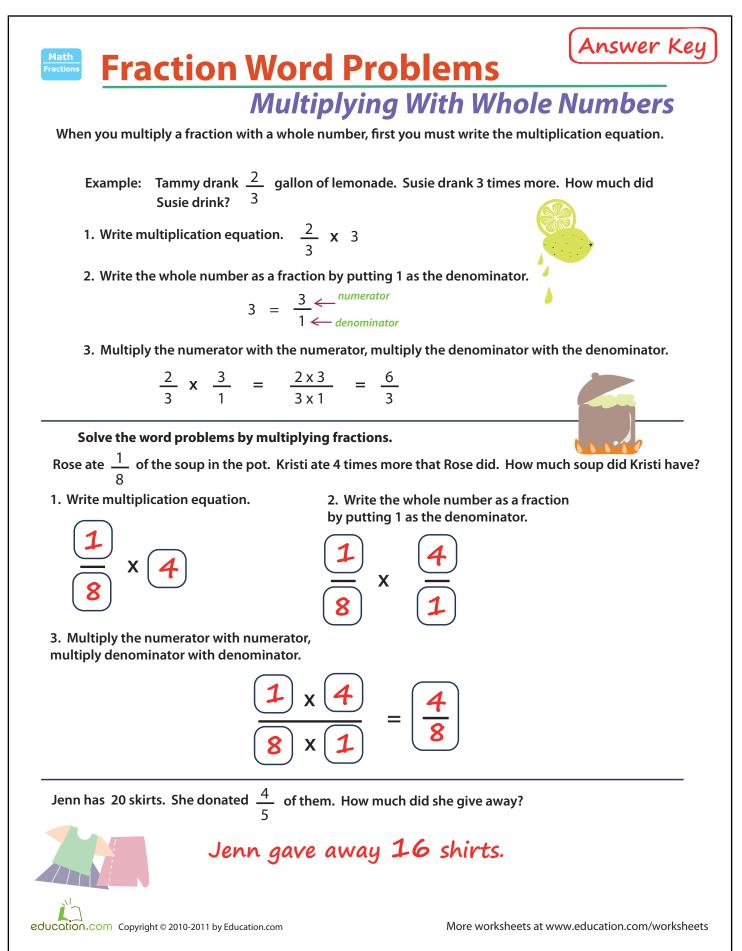
STRAWBERRY FRACTIONS

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.



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Multiplying	Fractions with Fractions
When you multiply a fraction with a fraction equation.	in a word problem, first, you must write the multipli
I	een. $\frac{2}{3}$ of his green marbles were given to him by ar's marbles are green marbles given to him by his
brother?	
1. Write multiplication equation. $\frac{1}{4}$ x	$\frac{2}{3}$
2. Multiply the numerator with numerator,	multiply denominator with denominator.
$\frac{1}{4} \times \frac{2}{3} \xleftarrow{numerator}{denominator}$	$= \frac{1 \times 2}{4 \times 3} = \frac{2}{12}$
Solve the word problems by multiplying fr	actions.
$\frac{1}{5}$ of Ashley's fruit are strawberries. $\frac{1}{4}$ of the	e strawberries are chocolate covered.
/hat fraction of Ashley's fruit are chocolate-co	vered strawberries?
1. Write the multiplication equation.	2. Multiply the numerator with the numerator, multiply the denominator with the denominator.
$\begin{array}{c} 2 \\ \hline 5 \end{array} \times \begin{array}{c} 1 \\ \hline 4 \end{array}$	$\frac{2 \times 1}{5 \times 4} = \frac{2}{20}$
$\frac{1}{2}$ of Mark's tea is white tea. $\frac{1}{2}$ of Mark's w /hat fraction of Mark's tea came from England $\frac{1}{2}$ of Mark's tea is white tea from	1?

Math Fractions 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. $\frac{1}{3} \times \frac{2}{2} = \frac{2}{6} \leftarrow denominator$ 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 ¹/₂ by 3. ¹/₂ x ³/₃ = ³/₆ ← denominator Notice that now the denominator is equal to 6.
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 $\frac{1}{6}$ mile in the morning and $\frac{2}{7}$ 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 $\frac{7}{7} = \begin{pmatrix} 7 \\ 42 \end{pmatrix}$ Multiply $\frac{2}{7}$ by $\frac{6}{6}$. $\frac{2}{7}$ x $\frac{6}{6} = \begin{pmatrix} 12 \\ 42 \end{pmatrix}$
2. Now you get $\begin{pmatrix} 7 \\ 42 \end{pmatrix}$ and $\begin{pmatrix} 12 \\ 42 \end{pmatrix}$ 3. Add them together. $\begin{pmatrix} 7 \\ 42 \end{pmatrix} + \begin{pmatrix} 12 \\ 42 \end{pmatrix} = \begin{pmatrix} 19 \\ 42 \end{pmatrix}$
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.
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