

Exploring

# FRACTIONS and DECIMALS

3<sup>RD</sup>  
Grade



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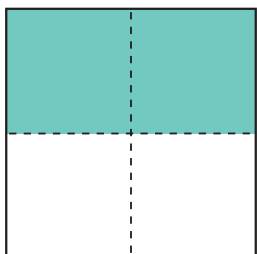
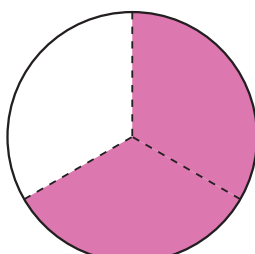
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*Answer Sheets*

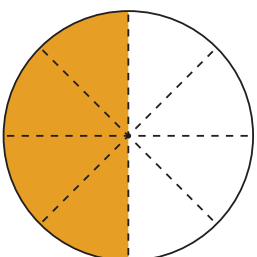
\* *Has an Answer Sheet*

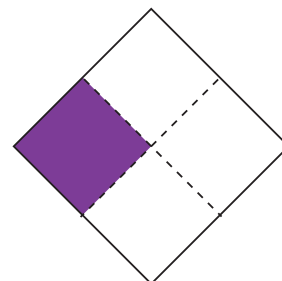
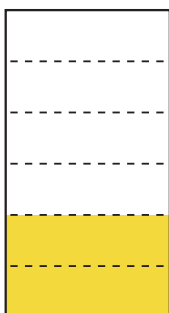
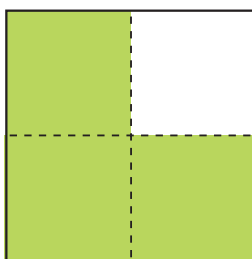
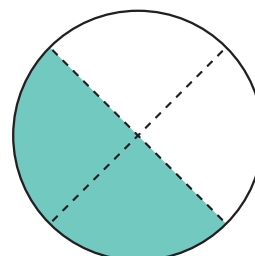
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# Fun Fractions

What fraction of the shape has been colored?  
Write the fraction under the shape.

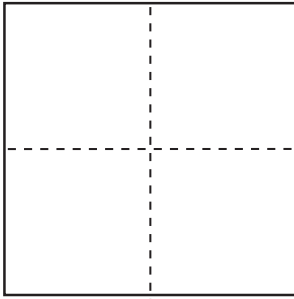

$$\frac{\square}{\square}$$

$$\frac{\square}{\square}$$

$$\frac{\square}{\square}$$

$$\frac{\square}{\square}$$

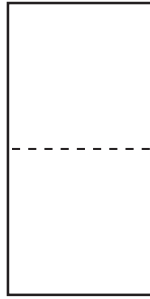
$$\frac{\square}{\square}$$

$$\frac{\square}{\square}$$

$$\frac{\square}{\square}$$

$$\frac{\square}{\square}$$

$$\frac{\square}{\square}$$

# Party Fractions

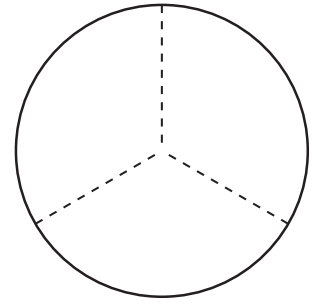
Color the shapes.



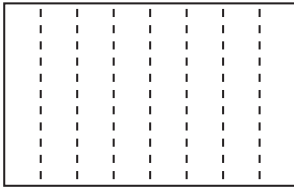
Color  $\frac{3}{4}$  of this square blue.



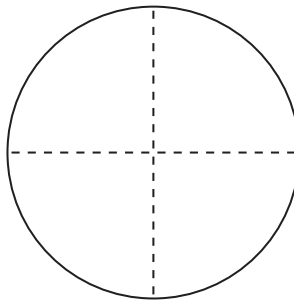
Color  $\frac{1}{2}$  of this rectangle purple.



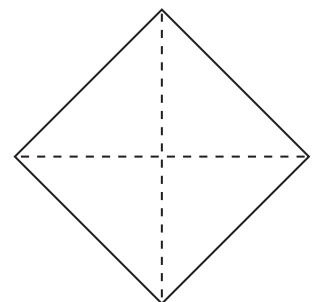
Color  $\frac{2}{3}$  of this circle orange.



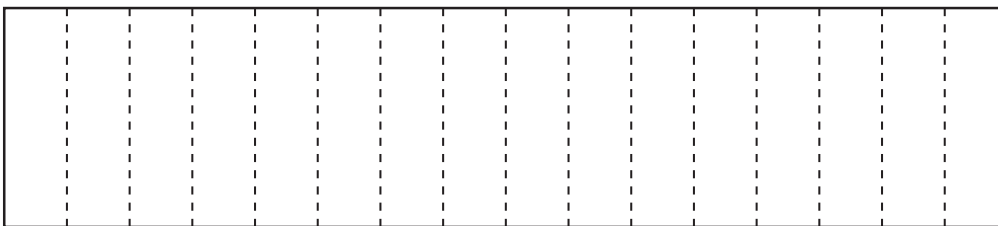
Color  $\frac{2}{8}$  of this rectangle green.



Color  $\frac{2}{4}$  of this circle yellow.



Color  $\frac{1}{4}$  of this diamond pink.



Color  $\frac{1}{16}$  of this rectangle orange.

Color  $\frac{4}{16}$  of this rectangle purple.

Color  $\frac{2}{16}$  of this rectangle green.

Color  $\frac{3}{16}$  of this rectangle blue.

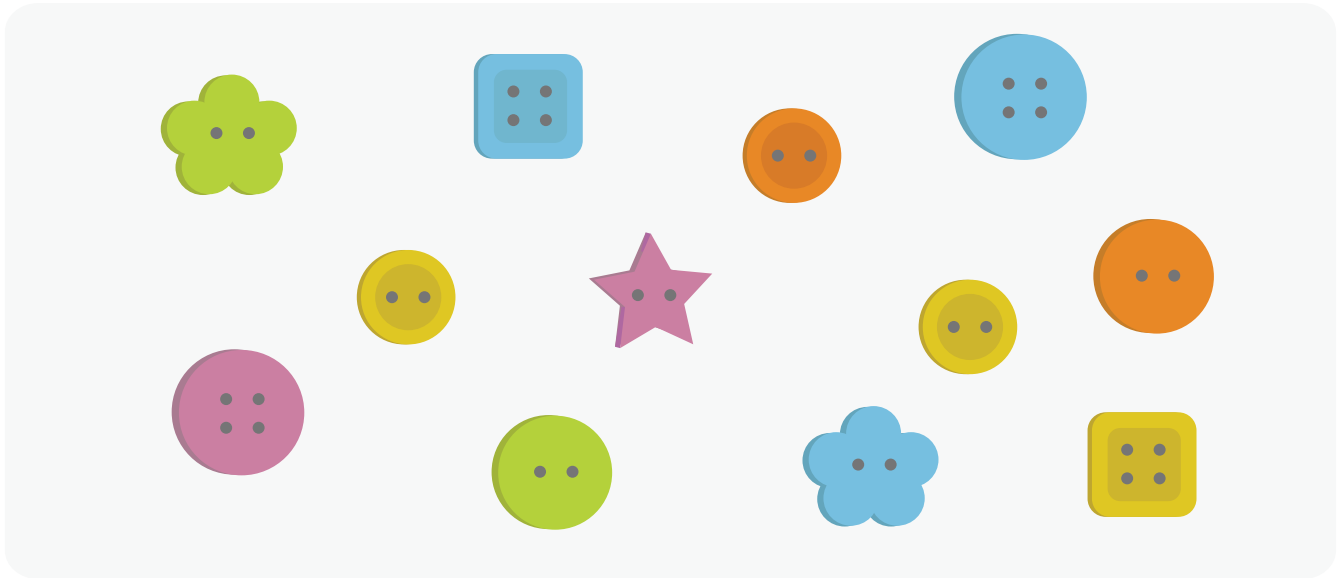
Color  $\frac{5}{16}$  of this rectangle pink.

What fraction of the rectangle is left white?


# Buttons, Buttons

Use the picture to answer the questions.



What fraction of the buttons are blue?  $\frac{\square}{\square}$

What fraction of the buttons are green?  $\frac{\square}{\square}$

What fraction of the buttons are stars?  $\frac{\square}{\square}$

What fraction of the buttons have 2 holes?  $\frac{\square}{\square}$

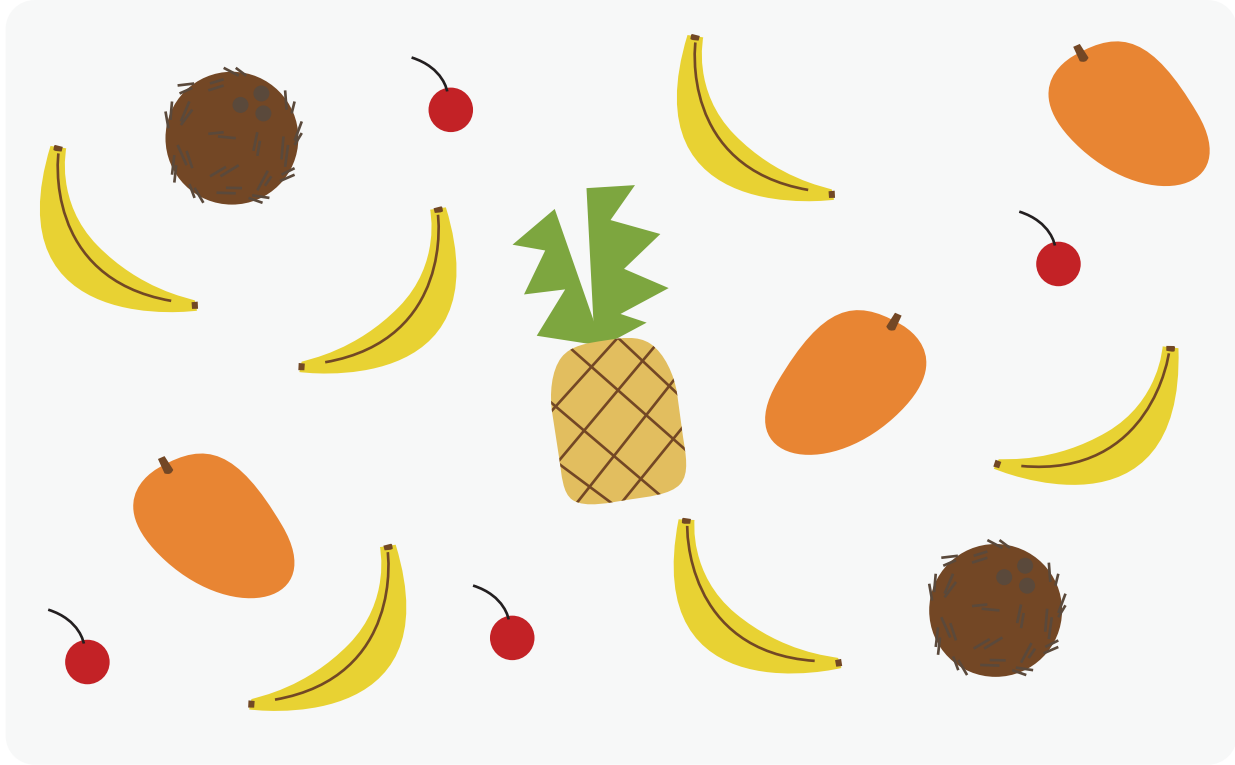
What fraction of the buttons are circles?  $\frac{\square}{\square}$

What fraction of the buttons have 4 holes?  $\frac{\square}{\square}$



# Tropical Fruit Fractions

Use the picture to answer the questions.



What fraction of the fruits are **cherries**?

What fraction of the fruits are **coconuts**?

What fraction of the fruits are **pineapples**?

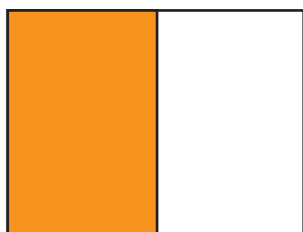
What fraction of the fruits are **mangoes**?

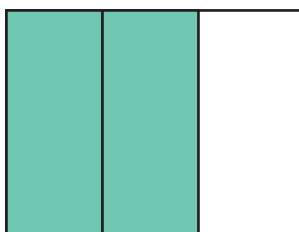
What fraction of the fruits are **bananas**?

# Equal Fractions

Look at the shaded areas of the pictures below, then circle the ones that are equal.



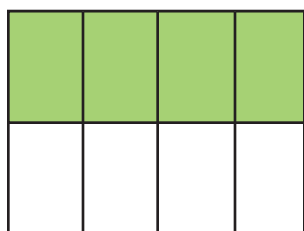
$$\frac{1}{2}$$



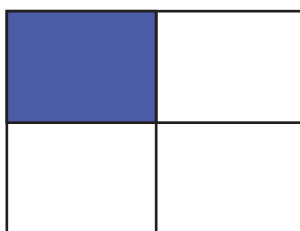
$$\frac{2}{3}$$



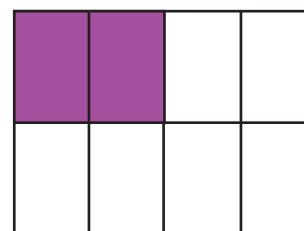
$$\frac{2}{4}$$



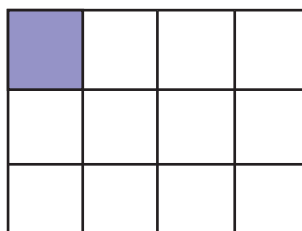
$$\frac{4}{8}$$



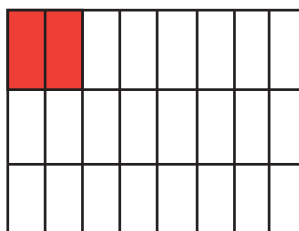
$$\frac{1}{4}$$



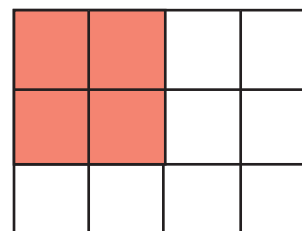
$$\frac{2}{8}$$



$$\frac{1}{12}$$

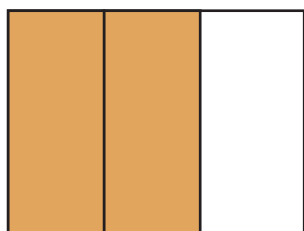


$$\frac{2}{24}$$

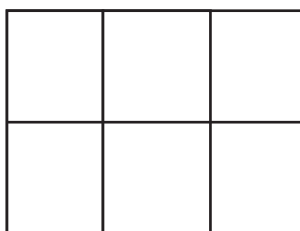


$$\frac{4}{12}$$

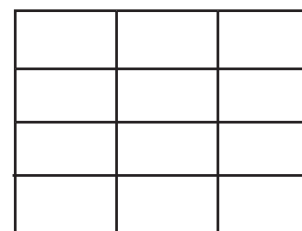
Look at the fraction on the left. Color the boxes on the right so they are each equal to the one on the left.



$$\frac{2}{3}$$

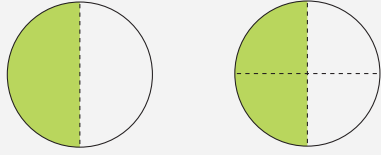


$$\frac{4}{6}$$



$$\frac{8}{12}$$

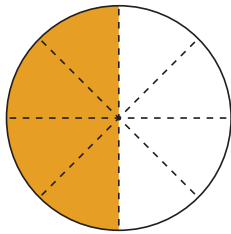
# They're the Same!



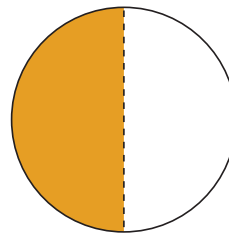
$\frac{1}{2}$  and  $\frac{2}{4}$  are different fractions that equal the same.  
They are **equivalent fractions**.

**Equivalent fractions** are fractions with the same value.

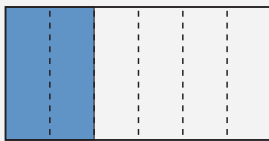
Write the equivalent fraction for each figure.



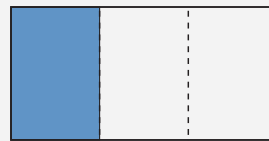
$\frac{4}{8}$



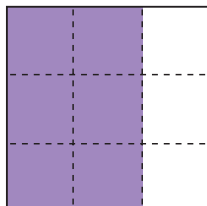
$\frac{\square}{\square}$



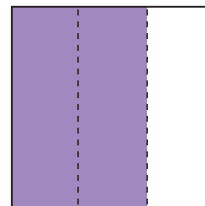
$\frac{2}{6}$



$\frac{\square}{\square}$



$\frac{6}{9}$

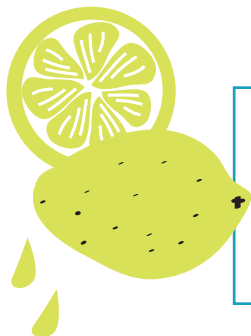


$\frac{\square}{\square}$



# Adding Fractions with the same denominator

Write the sum of each fraction below. Remember: when adding fractions with the same denominator, simply add the numerators and keep the denominator the same.



$$\frac{\overset{\text{numerator}}{3}}{\underset{\text{denominator}}{5}}$$

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

$$\frac{5}{5} + \frac{8}{5} = \boxed{\phantom{00}}$$

$$\frac{3}{7} + \frac{1}{7} = \boxed{\phantom{00}}$$

$$\frac{6}{3} + \frac{4}{3} = \boxed{\phantom{00}}$$

$$\frac{7}{4} + \frac{8}{4} = \boxed{\phantom{00}}$$

$$\frac{11}{9} + \frac{5}{9} = \boxed{\phantom{00}}$$

$$\frac{9}{8} + \frac{9}{8} = \boxed{\phantom{00}}$$

$$\frac{10}{12} + \frac{12}{12} = \boxed{\phantom{00}}$$

$$\frac{17}{22} + \frac{3}{22} = \boxed{\phantom{00}}$$

$$\frac{22}{50} + \frac{15}{50} + \frac{17}{50} = \boxed{\phantom{00}}$$

$$\frac{35}{100} + \frac{6}{100} + \frac{79}{100} + \frac{14}{100} = \boxed{\phantom{00}}$$



# Coconut Addition

Add the fractions.

To **add fractions** that have the same denominator, just add the numerators. The denominator stays the same.

$\frac{1}{2}$  — numerator  
— denominator

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

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

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

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

$$\frac{7}{12} + \frac{3}{12} = \frac{\square}{\square}$$

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

$$\frac{2}{10} + \frac{4}{10} = \frac{\square}{\square}$$

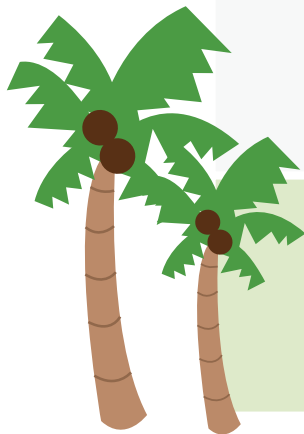
$$\frac{1}{5} + \frac{3}{5} = \frac{\square}{\square}$$

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

$$\frac{2}{8} + \frac{1}{8} = \frac{\square}{\square}$$

$$\frac{3}{7} + \frac{2}{7} = \frac{\square}{\square}$$

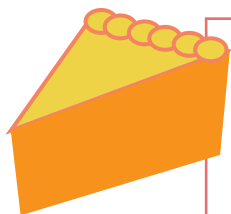
$$\frac{2}{9} + \frac{3}{9} = \frac{\square}{\square}$$



# Subtracting Fractions with the same denominator

Find the difference of each fraction equation below.

Remember: when subtracting fractions with the same denominator, simply subtract the numerators and keep the denominator the same.



$$\frac{4}{6}$$

numerator  
denominator

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

$$\frac{7}{4} - \frac{3}{4} = \boxed{\phantom{00}}$$

$$\frac{6}{8} - \frac{1}{8} = \boxed{\phantom{00}}$$

$$\frac{5}{7} - \frac{4}{7} = \boxed{\phantom{00}}$$

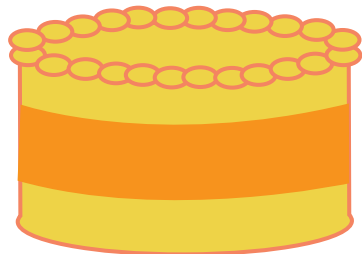
$$\frac{8}{9} - \frac{3}{9} = \boxed{\phantom{00}}$$

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

$$\frac{10}{6} - \frac{8}{6} = \boxed{\phantom{00}}$$

$$\frac{34}{10} - \frac{13}{10} = \boxed{\phantom{00}}$$

$$\frac{23}{24} - \frac{12}{24} = \boxed{\phantom{00}}$$



$$\frac{58}{65} - \frac{14}{65} - \frac{2}{65} = \boxed{\phantom{00}}$$

$$\frac{107}{120} - \frac{16}{120} - \frac{9}{120} - \frac{29}{120} = \boxed{\phantom{00}}$$

# Hula Subtraction

Subtract the fractions.

To **subtract fractions** that have the same denominator, subtract the numerators. The denominator stays the same.

$\frac{1}{2}$  — numerator  
— denominator

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

$$\frac{5}{6} - \frac{3}{6} = \frac{\square}{\square}$$

$$\frac{3}{5} - \frac{2}{5} = \frac{\square}{\square}$$

$$\frac{6}{8} - \frac{4}{8} = \frac{\square}{\square}$$

$$\frac{6}{10} - \frac{2}{10} = \frac{\square}{\square}$$

$$\frac{8}{12} - \frac{1}{12} = \frac{\square}{\square}$$

$$\frac{10}{11} - \frac{6}{11} = \frac{\square}{\square}$$

$$\frac{8}{10} - \frac{3}{10} = \frac{\square}{\square}$$

$$\frac{7}{9} - \frac{2}{9} = \frac{\square}{\square}$$

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

$$\frac{7}{8} - \frac{3}{8} = \frac{\square}{\square}$$

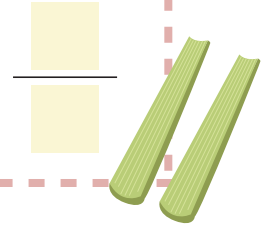
$$\frac{5}{6} - \frac{1}{6} = \frac{\square}{\square}$$



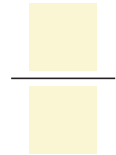
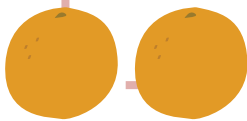
# Fraction Action

Answer each question.

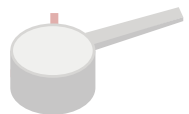
Kiki ate  $\frac{1}{6}$  of the celery sticks. What fraction of the celery sticks is left for Carl to eat?



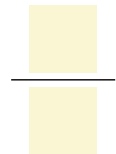
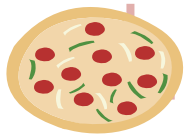
Fanny picked  $\frac{2}{5}$  of the oranges from the tree. What fraction of the oranges is left for Tina to pick?



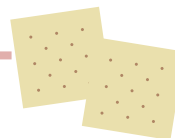
Pam poured  $\frac{1}{4}$  cup of sugar into the cake mix. Her mom poured another  $\frac{1}{4}$  cup. How much sugar is in the cake mix?



Gene ate  $\frac{2}{8}$  of the pizza pie. Tommy ate  $\frac{1}{8}$  of the pizza pie. What fraction of the pizza pie was eaten altogether?



Jordan ate  $\frac{3}{9}$  of the crackers. Sam ate  $\frac{4}{9}$  of the crackers. What fraction of the crackers is left?



# In the Classroom

Answer the questions below with the correct fractions.

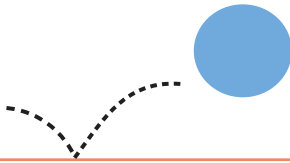
There are 36 students in my class. 22 of them are girls and 14 are boys. What fraction of students are girls?



Out of 36 students, 16 bring lunch boxes to school. What fraction of students brings their own lunch?



15 students out of 36 play dodgeball during recess. Write down the fraction of students who play dodgeball at recess.



10 out of 36 students love math, 13 love science, and the rest love English. Write down the fraction of students who love science.



## Challenge

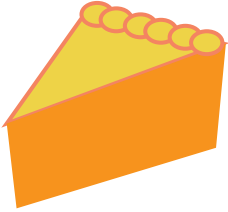
19 students out of 36 take music lessons after school. The rest of the class take art lessons. What fraction of students take art lessons?



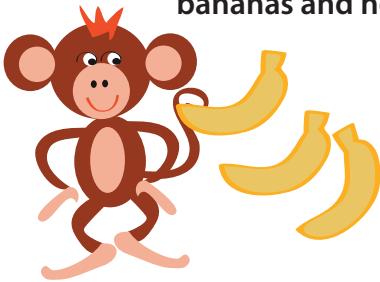
# Who Ate More?

Find out who ate more by comparing the fractions in each question.

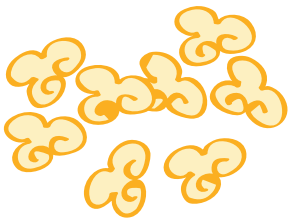
Lucy and Judy each had a pie of equal size. Lucy divided her pie into 6 equal slices and ate 2 of them. Judy divided her pie into 4 slices and ate 3 of them. Who ate more pie?



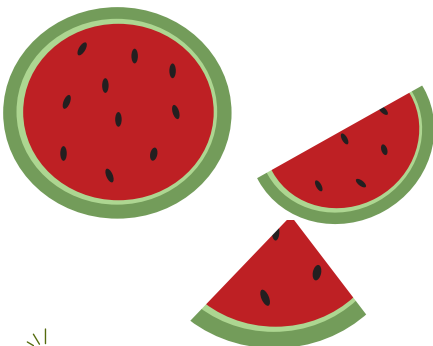
Mick the monkey had 10 bananas. He ate two-fifths of them. Mikey the monkey also had 10 bananas and he ate half of them. Which monkey ate more bananas?



Pete bought 8 bags of popcorn and ate three-fourths of them. Sandra bought 6 bags of popcorn and ate two-thirds of them. Who ate more popcorn?



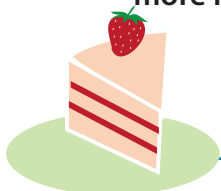
Tanya and Shawna each had one watermelon of equal size. Tanya divided hers into 12 equal slices and ate 8 of them. Shawna divided hers into 20 slices and ate 15 of them. Who ate more watermelon?



# My Recipes

Answer the fraction questions below.

The strawberry cake recipe calls for  $\frac{3}{5}$  cup of flour but I have only  $\frac{1}{5}$  cup. How much more flour do I need?



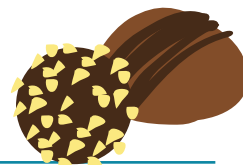
I need  $\frac{3}{4}$  cup of brown sugar and  $\frac{1}{4}$  cup of white sugar to make these donuts.  
How much sugar do I need in total?



The cupcake recipe calls for  $\frac{3}{3}$  cup of milk but I have  $\frac{1}{3}$  cup. How much more milk do I need?



The chocolate truffle recipe calls for  $1\frac{2}{3}$  cup of milk chocolate and  $\frac{1}{3}$  cup of dark chocolate. How much chocolate does the recipe call for in all?



## Challenge

The birthday cake recipe calls for  $2\frac{1}{4}$  cup of white eggs and  $\frac{1}{4}$  cup of egg yolk.  
It makes enough cake for 10 people. If I want to make a cake for 30 people, how many eggs do I need in total?





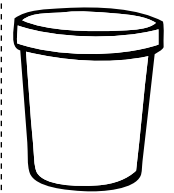
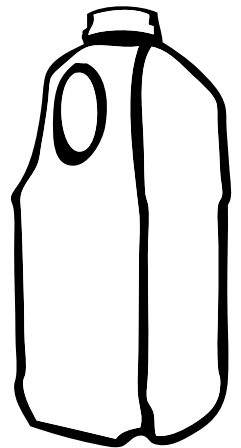
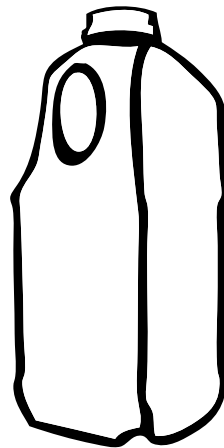
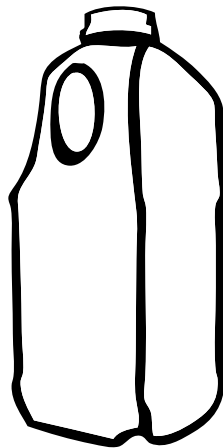
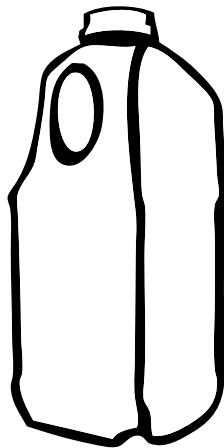
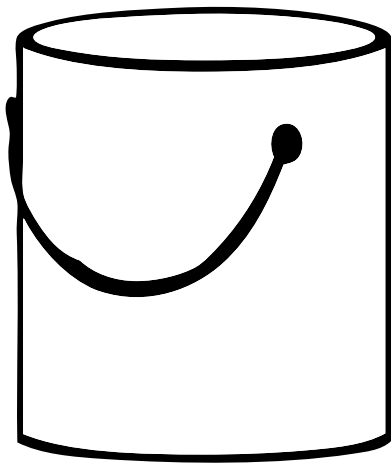
# Gallon Man

Gallon Man needs your help! Cut out the items below and paste on a new page in the shape of his body. Don't forget his head! To thank you, Gallon Man will help you figure out how many cups there are in a gallon.

## Items List

1 **gallon** of paint  
4 **quarts** of milk  
8 **pints** of ice cream  
16 **cups** for measuring

Materials:  
Blank paper  
Scissors  
Glue  
Crayons



# Lock & Key

Find the key that unlocks each lock! Connect each **fraction** in the lock with an equivalent **decimal** in the key.


$$\frac{5}{10}$$


$$\frac{12}{100}$$


$$\frac{2}{10}$$


$$\frac{6}{10}$$


$$\frac{15}{100}$$


$$\frac{6}{100}$$


$$\frac{4}{10}$$


$$\frac{3}{100}$$


$$0.12$$


$$0.4$$


$$0.5$$

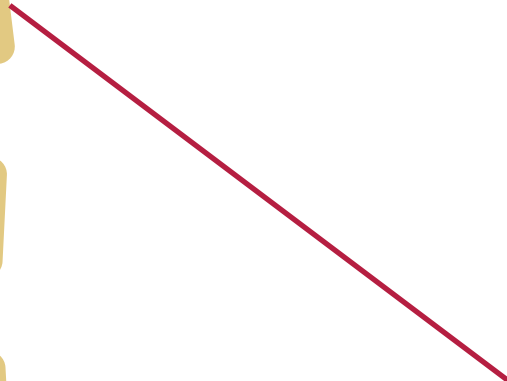

$$0.03$$


$$0.2$$


$$0.06$$


$$0.6$$


$$0.15$$



# Tenths Place

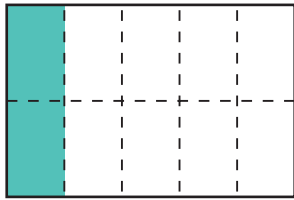
A **decimal** is a number that contains a decimal point.  
 Digits can be placed to the left and right of a decimal point  
 to show numbers greater than one or less than one.  
 The decimal point is placed to the right of the ones place.

tenths  
 ↓  
 0.7  
 ↑  
 decimal point

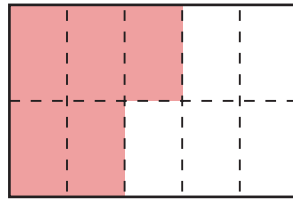
The first digit to the right of the decimal point is in the **tenths place**.

The decimal **0.7** is equal to **seven tenths**, or  $\frac{7}{10}$ .

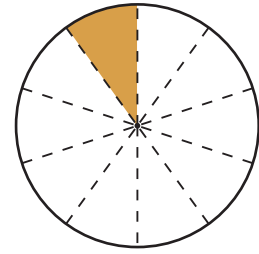
What fraction of the shape has been colored?  
 Write the fraction and its equivalent **decimal**.



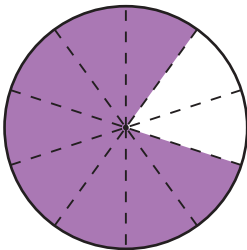
$$\frac{2}{10} = 0.2$$



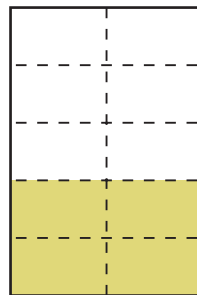
$$\frac{\quad}{\quad} = \quad$$



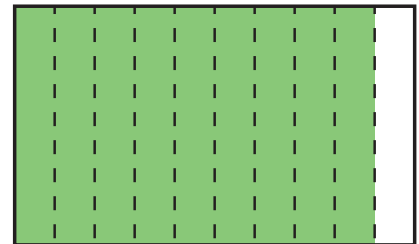
$$\frac{\quad}{\quad} = \quad$$



$$\frac{\quad}{\quad} = \quad$$

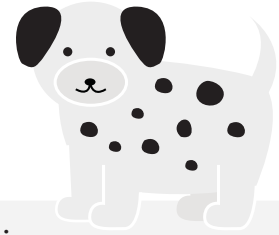


$$\frac{\quad}{\quad} = \quad$$



$$\frac{\quad}{\quad} = \quad$$

# Decimal Addition



Add the decimals. Show your work!

To **add decimals**, make sure that the decimal points line up.  
Add the numbers the same way you would in a normal equation.  
Carry the decimal point directly down into your answer!

$$\begin{array}{r} 1 \\ 5.2 \\ + 1.9 \\ \hline 7.1 \end{array}$$

$$\begin{array}{r} 7.4 \\ + 5.5 \\ \hline \end{array}$$

$$\begin{array}{r} 4.8 \\ + 1.7 \\ \hline \end{array}$$

$$\begin{array}{r} 8.26 \\ + 2.14 \\ \hline \end{array}$$

$$\begin{array}{r} 3.64 \\ + 4.61 \\ \hline \end{array}$$

$$\begin{array}{r} 4.35 \\ + 4.14 \\ \hline \end{array}$$

$$\begin{array}{r} 7.82 \\ + 1.17 \\ \hline \end{array}$$

$$\begin{array}{r} 2.78 \\ + 3.54 \\ \hline \end{array}$$

$$\begin{array}{r} 9.65 \\ + 1.81 \\ \hline \end{array}$$

$$\begin{array}{r} 5.34 \\ + 7.46 \\ \hline \end{array}$$

$$\begin{array}{r} 8.59 \\ + 1.62 \\ \hline \end{array}$$

$$\begin{array}{r} 4.81 \\ + 2.23 \\ \hline \end{array}$$

# Decimal Subtraction

Subtract the decimals. Show your work!

To **subtract decimals**, make sure that the decimal points line up. Subtract the numbers the same way you would in a normal equation. Carry the decimal point directly down into your answer!

$$\begin{array}{r} 5.6 \\ - 2.4 \\ \hline 3.2 \end{array}$$

$$\begin{array}{r} 6.4 \\ - 1.3 \\ \hline \end{array}$$

$$\begin{array}{r} 4.8 \\ - 1.9 \\ \hline \end{array}$$

$$\begin{array}{r} 3.98 \\ - 1.32 \\ \hline \end{array}$$

$$\begin{array}{r} 6.29 \\ - 2.12 \\ \hline \end{array}$$

$$\begin{array}{r} 5.82 \\ - 3.14 \\ \hline \end{array}$$

$$\begin{array}{r} 4.11 \\ - 1.23 \\ \hline \end{array}$$

$$\begin{array}{r} 3.24 \\ - 1.62 \\ \hline \end{array}$$

$$\begin{array}{r} 4.43 \\ - 1.15 \\ \hline \end{array}$$

$$\begin{array}{r} 7.65 \\ - 1.15 \\ \hline \end{array}$$

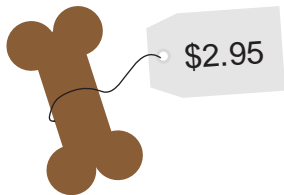
$$\begin{array}{r} 2.13 \\ - 1.09 \\ \hline \end{array}$$

$$\begin{array}{r} 5.26 \\ - 1.02 \\ \hline \end{array}$$

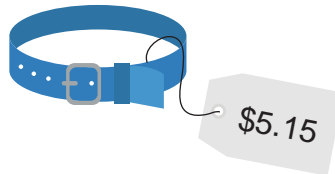


# Pet Shop

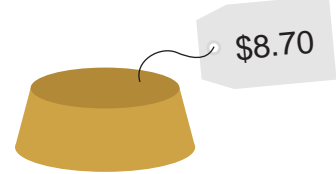
Jackie and her friends went to the pet shop to buy gifts for Patrick's new puppy, Pumpkin. Subtract to figure out how much change each person received.



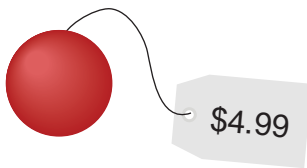
$$\begin{array}{r} \text{Jackie paid } \$5.00 \\ - \quad 2.95 \\ \hline 2.05 \end{array}$$



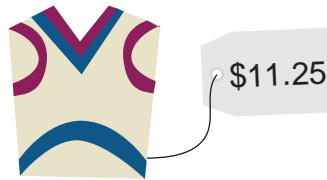
Percy paid \$6.00



Dani paid \$9.00



Lisa paid \$10.00



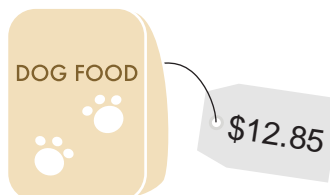
Nick paid \$15.00



Jenna paid \$7.00



Kim paid \$8.00



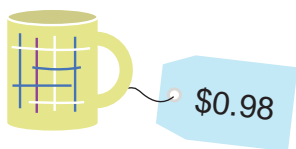
Tom paid \$20.00



Amanda paid \$7.00

# Art Museum Gift Shop

The third grade class at Parkside Elementary went on a trip to the art museum. Some of them bought items from the gift shop. Subtract to figure out how much change each person received.



Elsa paid     \$5.00  
      - 0.98  
      -----  
      4.02



Ivan paid     \$10.00



Ryan paid     \$5.60



Eric paid     \$3.00



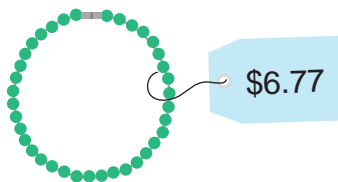
Elynn paid     \$10.99



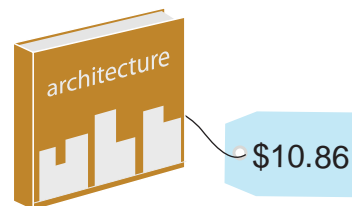
Gene paid \$10.00



Ann paid     \$15.00



Joy paid     \$7.00

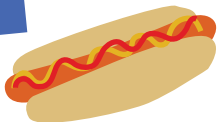


Joanne paid \$11.00

# Ballpark Snacks

Kyle and his friends went to the ballpark on Saturday. Each of them bought snacks to eat. Subtract to figure out how much change each person received.

\$1.97



$$\begin{array}{r} \text{Kyle paid} \quad \$2.00 \\ - \quad 1.97 \\ \hline 0.03 \end{array}$$



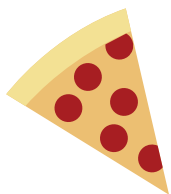
\$0.65

$$\begin{array}{r} \text{Alex paid} \quad \$5.00 \\ - \quad 0.65 \\ \hline \end{array}$$

\$2.20



$$\begin{array}{r} \text{Jonny paid} \quad \$3.00 \\ - \quad 2.20 \\ \hline \end{array}$$



\$3.80

$$\begin{array}{r} \text{Kira paid} \quad \$10.00 \\ - \quad 3.80 \\ \hline \end{array}$$

\$4.08



$$\begin{array}{r} \text{Laney paid} \quad \$5.00 \\ - \quad 4.08 \\ \hline \end{array}$$



\$0.88

$$\begin{array}{r} \text{Zach paid} \quad \$1.00 \\ - \quad 0.88 \\ \hline \end{array}$$

\$2.25

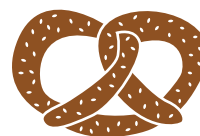


$$\begin{array}{r} \text{Taylor paid} \quad \$3.00 \\ - \quad 2.25 \\ \hline \end{array}$$



\$0.54

$$\begin{array}{r} \text{Anna paid} \quad \$1.00 \\ - \quad 0.54 \\ \hline \end{array}$$



\$1.20

$$\begin{array}{r} \text{Kelly paid} \quad \$2.00 \\ - \quad 1.20 \\ \hline \end{array}$$

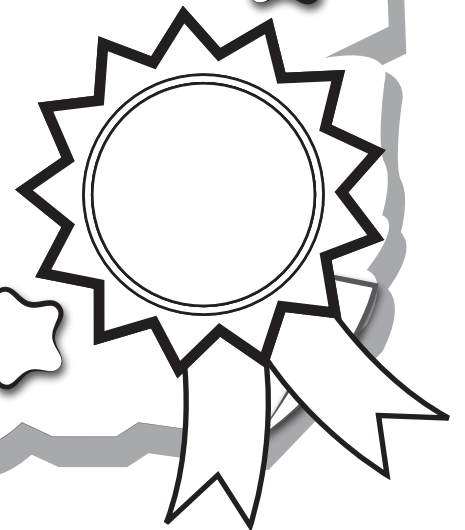




# Great job!

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# Answer Sheets

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## Exploring Fractions & Decimals

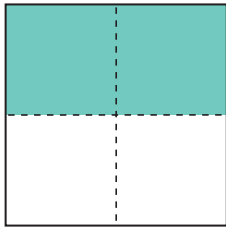
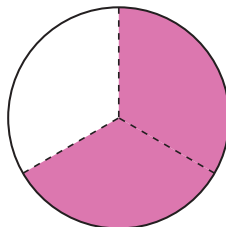
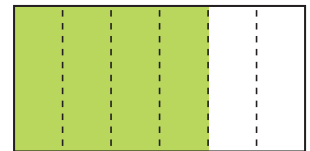
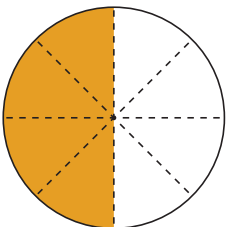
Fun Fractions  
Party Fractions  
Buttons, Buttons  
Tropical Fruit Fractions  
Equal Fractions  
They're the Same!  
Adding Fractions  
Coconut Addition  
Subtracting Fractions  
Hula Subtraction  
Fraction Action  
In the Classroom  
Who Ate More?  
My Recipes  
Lock & Key  
Tenths Place  
Decimal Addition  
Decimal Subtraction  
Pet Shop  
Art Museum Gift Shop  
Ballpark Snacks

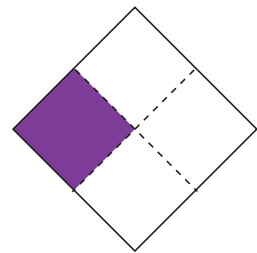
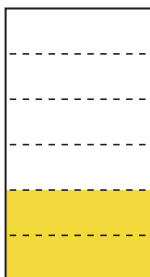
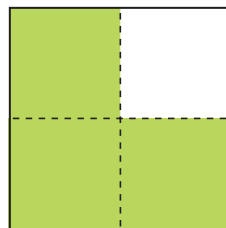
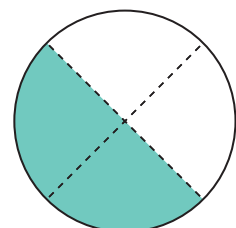
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# Answer Sheet

## Fun Fractions

What fraction of the shape has been colored?  
Write the fraction under the shape.

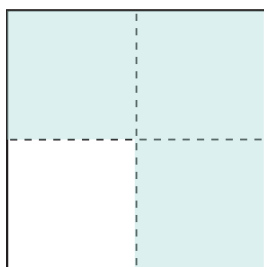

$$\frac{2}{4}$$

$$\frac{2}{3}$$

$$\frac{4}{6}$$

$$\frac{4}{8}$$

$$\frac{6}{10}$$

$$\frac{1}{4}$$

$$\frac{2}{6}$$

$$\frac{3}{4}$$

$$\frac{2}{4}$$

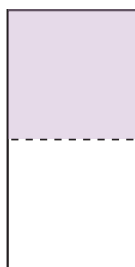
# Answer Sheet

## Party Fractions

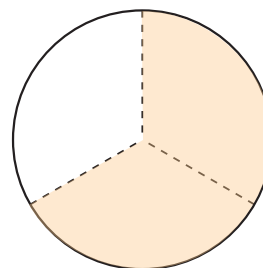
Color the shapes.



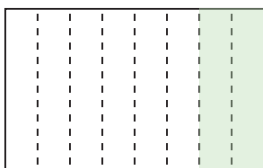
Color  $\frac{3}{4}$  of this square blue.



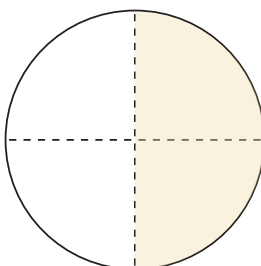
Color  $\frac{1}{2}$  of this rectangle purple.



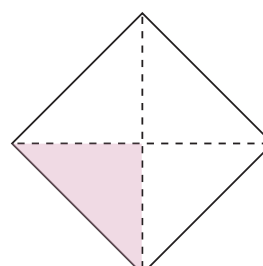
Color  $\frac{2}{3}$  of this circle orange.



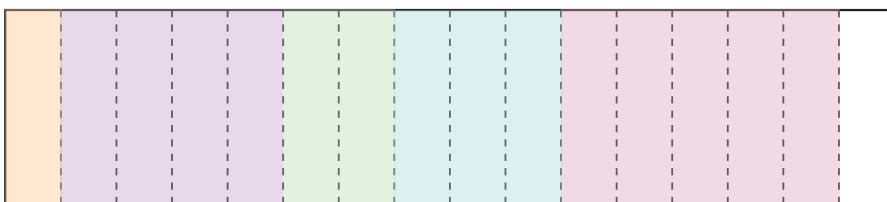
Color  $\frac{2}{8}$  of this rectangle green.



Color  $\frac{2}{4}$  of this circle yellow.



Color  $\frac{1}{4}$  of this diamond pink.



Color  $\frac{1}{16}$  of this rectangle orange.

Color  $\frac{4}{16}$  of this rectangle purple.

Color  $\frac{2}{16}$  of this rectangle green.

Color  $\frac{3}{16}$  of this rectangle blue.

Color  $\frac{5}{16}$  of this rectangle pink.

What fraction of the rectangle is left white?

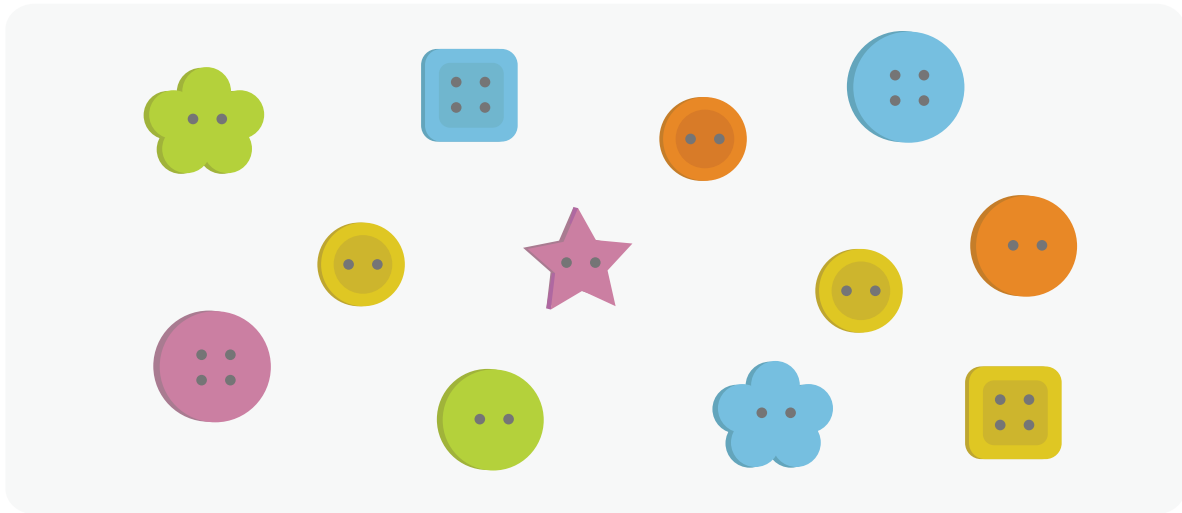
$\frac{1}{16}$



# Answer Sheet

## Buttons, Buttons

Use the picture to answer the questions.



What fraction of the buttons are blue?  $\frac{3}{12}$

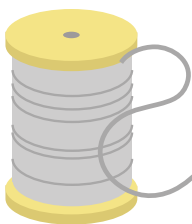
What fraction of the buttons are green?  $\frac{2}{12}$

What fraction of the buttons are stars?  $\frac{1}{12}$

What fraction of the buttons have 2 holes?  $\frac{8}{12}$

What fraction of the buttons are circles?  $\frac{7}{12}$

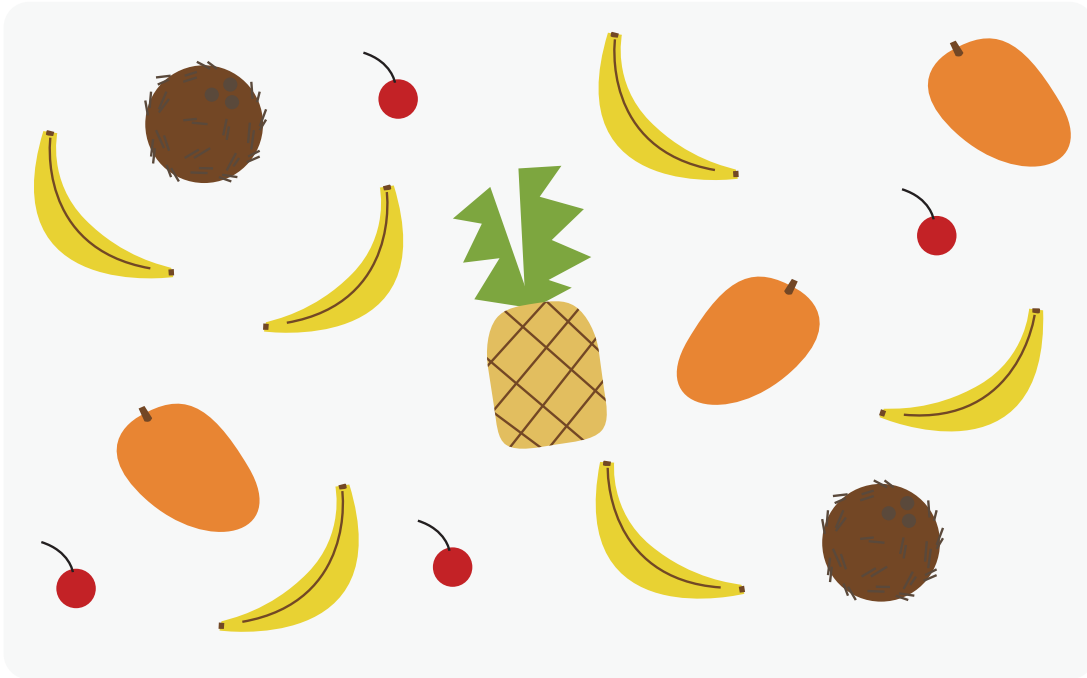
What fraction of the buttons have 4 holes?  $\frac{4}{12}$



# Answer Sheet

## Tropical Fruit Fractions

Use the picture to answer the questions.



What fraction of the fruits are cherries?

$$\frac{4}{16}$$

What fraction of the fruits are coconuts?

$$\frac{2}{16}$$

What fraction of the fruits are pineapples?

$$\frac{1}{16}$$

What fraction of the fruits are mangoes?

$$\frac{3}{16}$$

What fraction of the fruits are bananas?

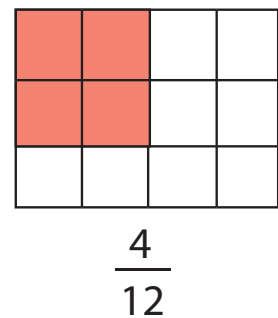
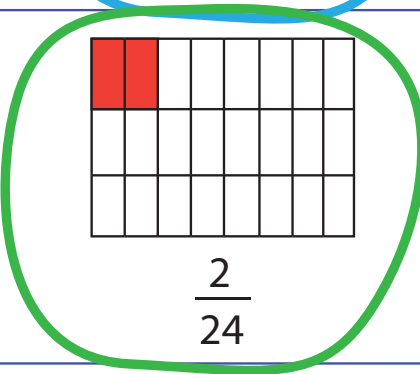
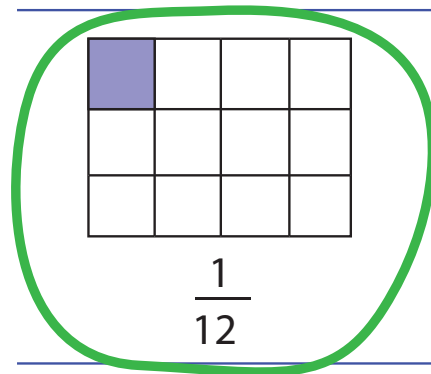
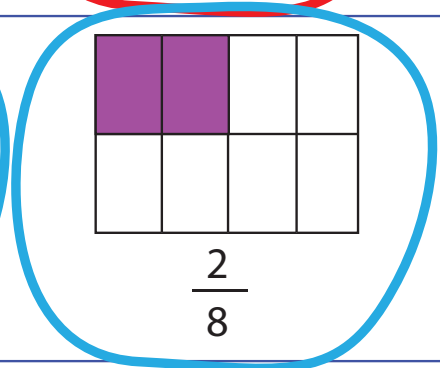
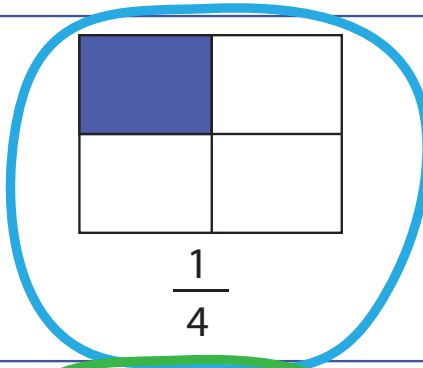
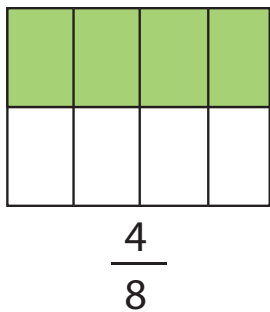
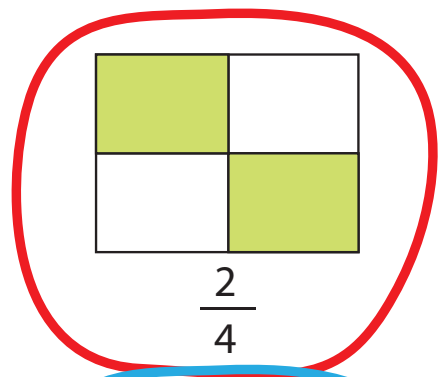
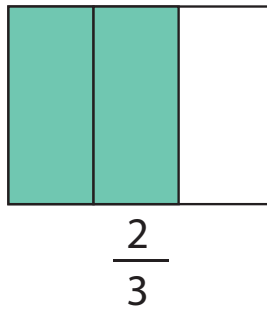
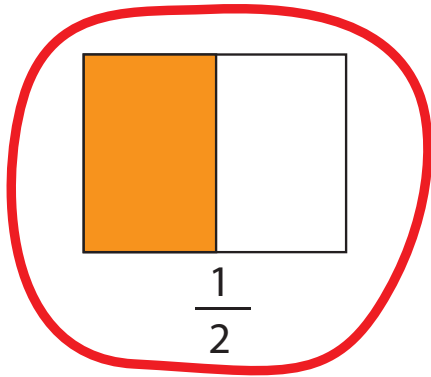
$$\frac{6}{16}$$

# Answer Sheet

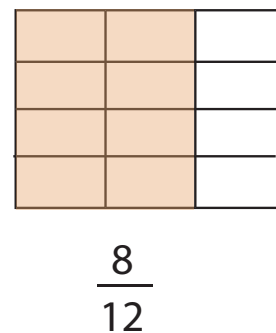
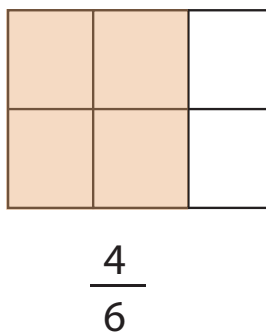
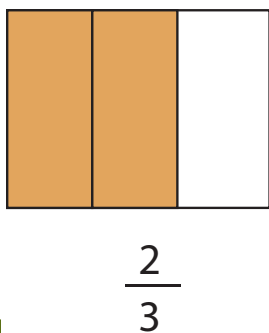
Math  
Fractions

## Equal Fractions

Look at the shaded areas of the pictures below, then circle the ones that are equal.

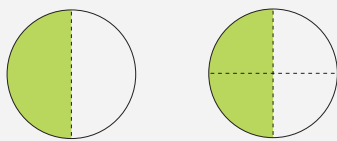


Look at the fraction on the left. Color the boxes on the right so they are each equal to the one on the left.



# Answer Sheet

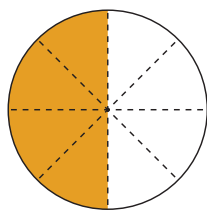
## They're the Same!



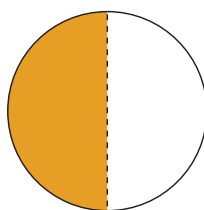
$\frac{1}{2}$  and  $\frac{2}{4}$  are different fractions that equal the same.  
They are **equivalent fractions**.

**Equivalent fractions** are fractions with the same value.

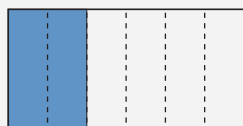
Write the equivalent fraction for each figure.



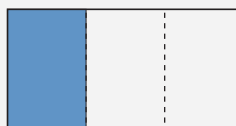
$$\frac{4}{8}$$



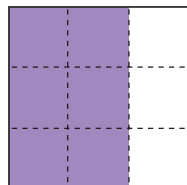
$$\frac{1}{2}$$



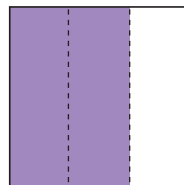
$$\frac{2}{6}$$



$$\frac{1}{3}$$



$$\frac{6}{9}$$



$$\frac{2}{3}$$

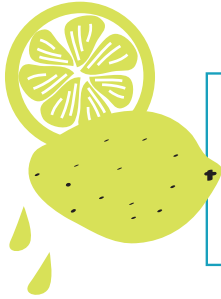


# Answer Sheet

Math  
Fractions

## Adding Fractions with the same denominator

Write the sum of each fraction below. Remember: when adding fractions with the same denominator, simply add the numerators and keep the denominator the same.



$$\frac{\overset{\text{numerator}}{3}}{\underset{\text{denominator}}{5}}$$

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

$$\frac{5}{5} + \frac{8}{5} = \frac{13}{5}$$

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

$$\frac{6}{3} + \frac{4}{3} = \frac{10}{3}$$

$$\frac{7}{4} + \frac{8}{4} = \frac{15}{4}$$

$$\frac{11}{9} + \frac{5}{9} = \frac{16}{9}$$

$$\frac{9}{8} + \frac{9}{8} = \frac{18}{8}$$

$$\frac{10}{12} + \frac{12}{12} = \frac{22}{12}$$

$$\frac{17}{22} + \frac{3}{22} = \frac{20}{22}$$

$$\frac{22}{50} + \frac{15}{50} + \frac{17}{50} = \frac{54}{50}$$

$$\frac{35}{100} + \frac{6}{100} + \frac{79}{100} + \frac{14}{100} = \frac{134}{100}$$



# Answer Sheet

## Coconut Addition

Add the fractions.

To **add fractions** that have the same denominator, just add the numerators. The denominator stays the same.

$\frac{1}{2}$  — numerator  
— denominator

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

$$\frac{4}{8} + \frac{3}{8} = \frac{7}{8}$$

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

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

$$\frac{7}{12} + \frac{3}{12} = \frac{10}{12}$$

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

$$\frac{2}{10} + \frac{4}{10} = \frac{6}{10}$$

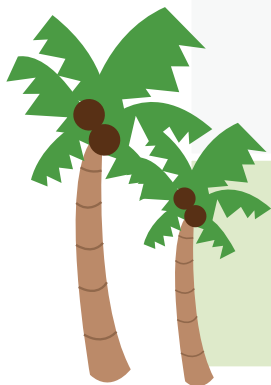
$$\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$$

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

$$\frac{2}{8} + \frac{1}{8} = \frac{3}{8}$$

$$\frac{3}{7} + \frac{2}{7} = \frac{5}{7}$$

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



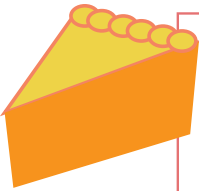
# Answer Sheet

Math  
Fractions

## Subtracting Fractions with the same denominator

Find the difference of each fraction equation below.

Remember: when subtracting fractions with the same denominator, simply subtract the numerators and keep the denominator the same.



$$\frac{4}{6}$$

numerator  
denominator

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

$$\frac{7}{4} - \frac{3}{4} =$$

$$\frac{4}{4}$$

$$\frac{6}{8} - \frac{1}{8} =$$

$$\frac{5}{8}$$

$$\frac{5}{7} - \frac{4}{7} =$$

$$\frac{1}{7}$$

$$\frac{8}{9} - \frac{3}{9} =$$

$$\frac{5}{9}$$

$$\frac{2}{5} - \frac{2}{5} =$$

$$\frac{0}{5}$$

$$\frac{10}{6} - \frac{8}{6} =$$

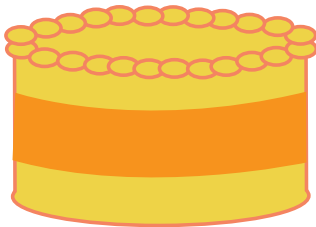
$$\frac{2}{6}$$

$$\frac{34}{10} - \frac{13}{10} =$$

$$\frac{21}{10}$$

$$\frac{23}{24} - \frac{12}{24} =$$

$$\frac{11}{24}$$



$$\frac{58}{65} - \frac{14}{65} - \frac{2}{65} =$$

$$\frac{42}{65}$$

$$\frac{107}{120} - \frac{16}{120} - \frac{9}{120} - \frac{29}{120} =$$

$$\frac{53}{120}$$

# Answer Sheet

## Hula Subtraction

Subtract the fractions

To **subtract fractions** that have the same denominator, subtract the numerators. The denominator stays the same.

1. — numerator  
2. — denominator

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

$$\frac{5}{6} - \frac{3}{6} = \frac{2}{6}$$

$$\frac{3}{5} - \frac{2}{5} = \frac{1}{5}$$

$$\frac{6}{8} - \frac{4}{8} = \frac{2}{8}$$

$$\frac{6}{10} - \frac{2}{10} = \frac{4}{10}$$

$$\frac{8}{12} - \frac{1}{12} = \frac{7}{12}$$

$$\frac{10}{11} - \frac{6}{11} = \frac{4}{11}$$

$$\frac{8}{10} - \frac{3}{10} = \frac{5}{10}$$

$$\frac{7}{9} - \frac{2}{9} = \frac{5}{9}$$

$$\frac{4}{7} - \frac{1}{7} = \frac{3}{7}$$

$$\frac{7}{8} - \frac{3}{8} = \frac{4}{8}$$

$$\frac{5}{6} - \frac{1}{6} = \frac{4}{6}$$



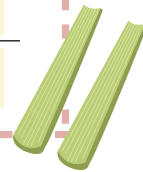
# Answer Sheet

## Fraction Action

Answer each question.

Kiki ate  $\frac{1}{6}$  of the celery sticks. What fraction of the celery sticks is left for Carl to eat?

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



Fanny picked  $\frac{2}{5}$  of the oranges from the tree. What fraction of the oranges is left for Tina to pick?

$$\frac{5}{5} - \frac{2}{5} = \frac{3}{5}$$



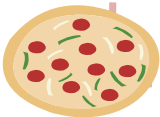
Pam poured  $\frac{1}{4}$  cup of sugar into the cake mix. Her mom poured another  $\frac{1}{4}$  cup. How much sugar is in the cake mix?

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



Gene ate  $\frac{2}{8}$  of the pizza pie. Tommy ate  $\frac{1}{8}$  of the pizza pie. What fraction of the pizza pie was eaten altogether?

$$\frac{2}{8} + \frac{1}{8} = \frac{3}{8}$$



Jordan ate  $\frac{3}{9}$  of the crackers. Sam ate  $\frac{4}{9}$  of the crackers. What fraction of the crackers is left?

$$\frac{9}{9} - \frac{3}{9} - \frac{4}{9} = \frac{2}{9}$$



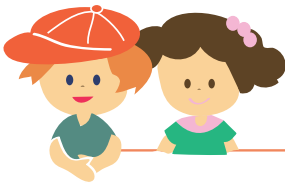
# Answer Sheet

Math  
Fractions

## In the Classroom

Answer the questions below with the correct fractions.

There are 36 students in my class. 22 of them are girls and 14 are boys. What fraction of students are girls?



$$\frac{22}{36}$$

Out of 36 students, 16 bring lunch boxes to school. What fraction of students brings their own lunch?

$$\frac{16}{36}$$



15 students out of 36 play dodgeball during recess. Write down the fraction of students who play dodgeball at recess.



$$\frac{15}{36}$$

10 out of 36 students love math, 13 love science, and the rest love English. Write down the fraction of students who love science.

$$\frac{13}{36}$$



## Challenge

19 students out of 36 take music lessons after school. The rest of the class take art lessons. What fraction of students take art lessons?



$$\frac{17}{36}$$

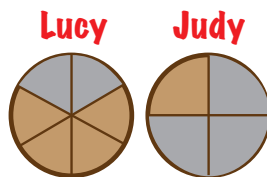
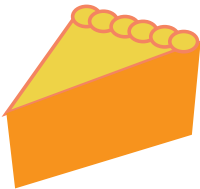
# Answer Sheet

## Math Fractions

## Who Ate More?

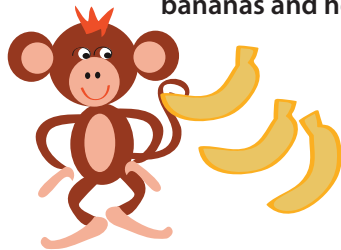
Find out who ate more by comparing the fractions in each question.

Lucy and Judy each had a pie of equal size. Lucy divided her pie into 6 equal slices and ate 2 of them. Judy divided her pie into 4 slices and ate 3 of them. Who ate more pie?

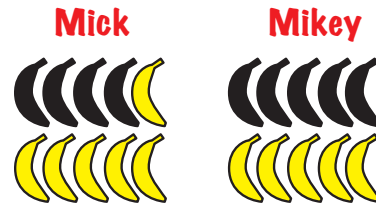


**There is more of Lucy's pie left than Judy's pie, therefore, Judy ate more pie.**

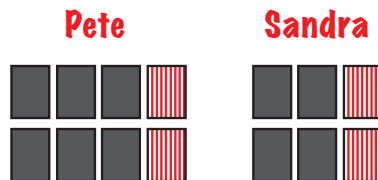
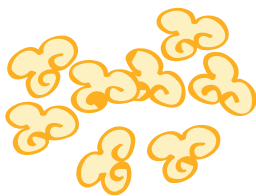
Mick the monkey had 10 bananas. He ate two-fifths of them. Mikey the monkey also had 10 bananas and he ate half of them. Which monkey ate more bananas?



**Mick ate 4 bananas, and Mikey ate 5 bananas. Therefore, Mikey ate more bananas.**

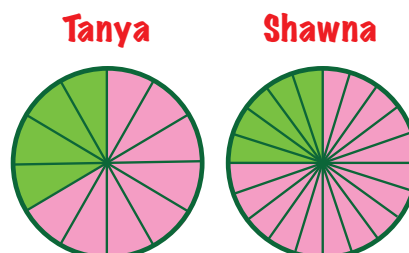
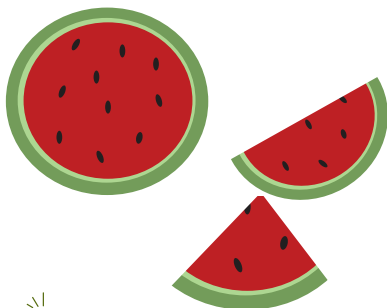


Pete bought 8 bags of popcorn and ate three-fourths of them. Sandra bought 6 bags of popcorn and ate two-thirds of them. Who ate more popcorn?



**Sandra ate 4 bags of popcorn, and Pete ate 6. Therefore, Pete ate more popcorn.**

Tanya and Shawna each had one watermelon of equal size. Tanya divided hers into 12 equal slices and ate 8 of them. Shawna divided hers into 20 slices and ate 15 of them. Who ate more watermelon?



**There is more of Tanya's watermelon left, therefore, Shawna ate more watermelon.**

# Answer Sheet

Math  
Fractions

## My Recipes

Answer the fraction questions below.

The strawberry cake recipe calls for  $\frac{3}{5}$  cup of flour but I have only  $\frac{1}{5}$  cup. How much more flour do I need?



$$\frac{3}{5} - \frac{1}{5} = \frac{2}{5}$$

I need  $\frac{2}{5}$  cups more flour.

I need  $\frac{3}{4}$  cup of brown sugar and  $\frac{1}{4}$  cup of white sugar to make these donuts.

How much sugar do I need in total?

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

I need 1 cup of sugar in total.



The cupcake recipe calls for  $\frac{3}{3}$  cup of milk but I have  $\frac{1}{3}$  cup. How much more milk do I need?



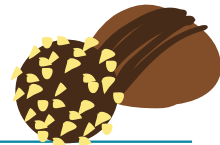
$$\frac{3}{3} - \frac{1}{3} = \frac{2}{3}$$

I need  $\frac{2}{3}$  cups more milk.

The chocolate truffle recipe calls for  $1\frac{2}{3}$  cup of milk chocolate and  $\frac{1}{3}$  cup of dark chocolate. How much chocolate does the recipe call for in all?

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

I need 2 cups of chocolate total.



### Challenge

The birthday cake recipe calls for  $2\frac{1}{4}$  cup of white eggs and  $\frac{1}{4}$  cup of egg yolk.

It makes enough cake for 10 people. If I want to make a cake for 30 people, how many eggs do I need in total?

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

Total eggs for  
10 people

$$2\frac{2}{4} + 2\frac{2}{4} + 2\frac{2}{4} = 6\frac{6}{4} = 7\frac{2}{4}$$

Total eggs for  
30 people

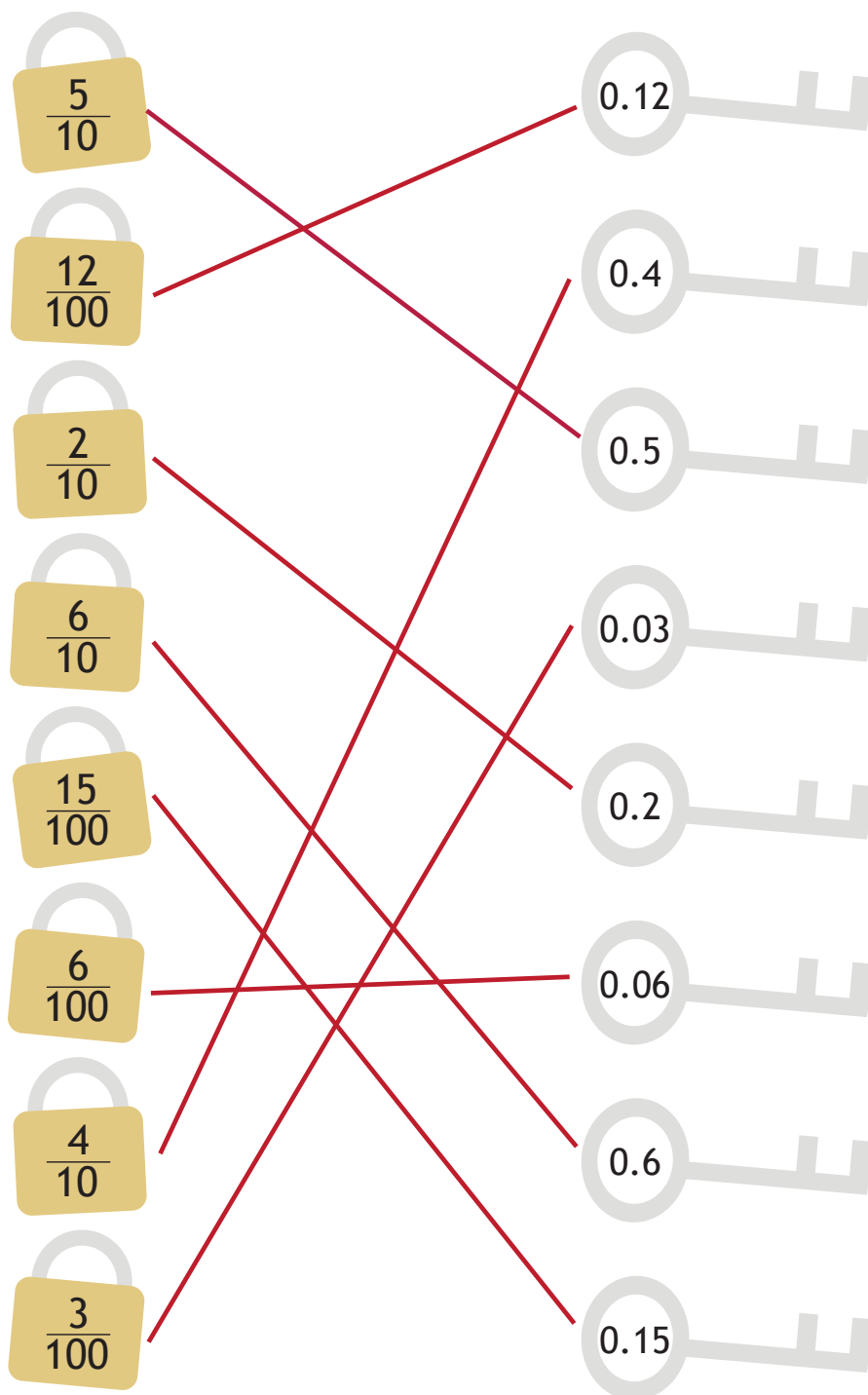




# Answer Sheet

## Lock & Key

Find the key that unlocks each lock! Connect each **fraction** in the lock with an equivalent **decimal** in the key.



# Answer Sheet

## Tenths Place

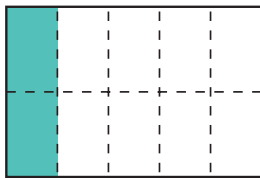
A **decimal** is a number that contains a decimal point. Digits can be placed to the left and right of a decimal point to show numbers greater than one or less than one. The decimal point is placed to the right of the ones place.

tenths  
↓  
0.7  
↑  
decimal point

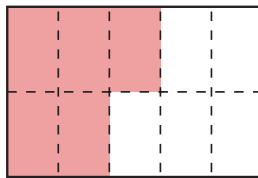
The first digit to the right of the decimal point is in the **tenths place**.

The decimal **0.7** is equal to **seven tenths**, or  $\frac{7}{10}$ .

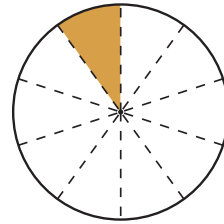
What fraction of the shape has been colored?  
Write the fraction and its equivalent **decimal**.



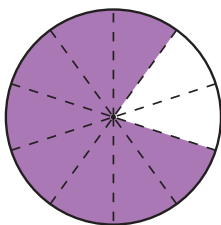
$$\frac{2}{10} = 0.2$$



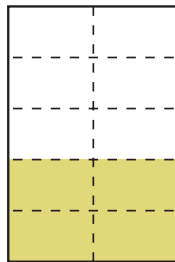
$$\frac{5}{10} = 0.5$$



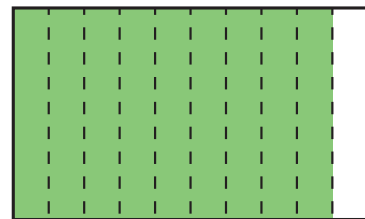
$$\frac{1}{10} = 0.1$$



$$\frac{8}{10} = 0.8$$



$$\frac{4}{10} = 0.4$$



$$\frac{9}{10} = 0.9$$

# Answer Sheet

## Decimal Addition



**Add the decimals** Show your work!

To **add decimals**, make sure that the decimal points line up. Add the numbers the same way you would in a normal equation. Carry the decimal point directly down into your answer!

$$\begin{array}{r} 1 \\ 5.2 \\ + 1.9 \\ \hline 7.1 \end{array}$$

$$\begin{array}{r} 7.4 \\ + 5.5 \\ \hline 12.9 \end{array}$$

$$\begin{array}{r} 1 \\ 4.8 \\ + 1.7 \\ \hline 6.5 \end{array}$$

$$\begin{array}{r} 1 \\ 8.26 \\ + 2.14 \\ \hline 10.40 \end{array}$$

$$\begin{array}{r} 1 \\ 3.64 \\ + 4.61 \\ \hline 8.25 \end{array}$$

$$\begin{array}{r} 4.35 \\ + 4.14 \\ \hline 8.49 \end{array}$$

$$\begin{array}{r} 7.82 \\ + 1.17 \\ \hline 8.99 \end{array}$$

$$\begin{array}{r} 1 \quad 1 \\ 2.78 \\ + 3.54 \\ \hline 6.42 \end{array}$$

$$\begin{array}{r} 1 \\ 9.65 \\ + 1.81 \\ \hline 11.46 \end{array}$$

$$\begin{array}{r} 1 \\ 5.34 \\ + 7.46 \\ \hline 12.80 \end{array}$$

$$\begin{array}{r} 1 \quad 1 \\ 8.59 \\ + 1.62 \\ \hline 10.21 \end{array}$$

$$\begin{array}{r} 1 \\ 4.81 \\ + 2.23 \\ \hline 7.04 \end{array}$$

# Answer Sheet

## Decimal Subtraction

**Subtract** the **decimals**. Show your work!

To **subtract decimals**, make sure that the decimal points line up. Subtract the numbers the same way you would in a normal equation. Carry the decimal point directly down into your answer!

$$\begin{array}{r} 5.6 \\ - 2.4 \\ \hline 3.2 \end{array}$$

$$\begin{array}{r} 6.4 \\ - 1.3 \\ \hline 5.1 \end{array}$$

$$\begin{array}{r} \overset{31}{4.8} \\ - 1.9 \\ \hline 2.9 \end{array}$$

$$\begin{array}{r} 3.98 \\ - 1.32 \\ \hline 2.66 \end{array}$$

$$\begin{array}{r} 6.29 \\ - 2.12 \\ \hline 4.17 \end{array}$$

$$\begin{array}{r} \overset{71}{5.82} \\ - 3.14 \\ \hline 2.68 \end{array}$$

$$\begin{array}{r} \overset{3101}{4.11} \\ - 1.23 \\ \hline 2.88 \end{array}$$

$$\begin{array}{r} \overset{212}{3.24} \\ - 1.62 \\ \hline 1.62 \end{array}$$

$$\begin{array}{r} \overset{31}{4.43} \\ - 1.15 \\ \hline 3.28 \end{array}$$

$$\begin{array}{r} 7.65 \\ - 1.15 \\ \hline 6.50 \end{array}$$

$$\begin{array}{r} \overset{01}{2.13} \\ - 1.09 \\ \hline 1.04 \end{array}$$

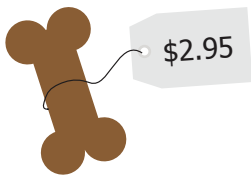
$$\begin{array}{r} 5.26 \\ - 1.02 \\ \hline 4.24 \end{array}$$



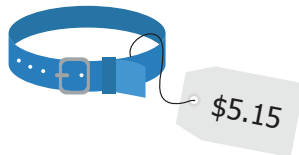
# Answer Sheet

## Pet Shop

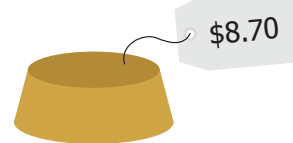
Jackie and her friends went to the pet shop to buy gifts for Patrick's new puppy, Pumpkin. Subtract to figure out how much change each person received.



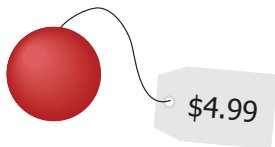
$$\begin{array}{r} \text{Jackie paid } \$5.00 \\ - 2.95 \\ \hline \$2.05 \end{array}$$



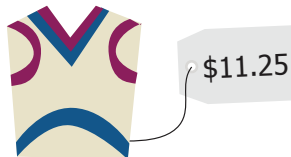
$$\begin{array}{r} \text{Percy paid } \$5.15 \\ - 5.15 \\ \hline \$0.85 \end{array}$$



$$\begin{array}{r} \text{Dani paid } \$9.00 \\ - 8.70 \\ \hline \$0.30 \end{array}$$



$$\begin{array}{r} \text{Lisa paid } \$10.00 \\ - 4.99 \\ \hline \$5.01 \end{array}$$



$$\begin{array}{r} \text{Nick paid } \$15.00 \\ - 11.25 \\ \hline \$3.75 \end{array}$$



$$\begin{array}{r} \text{Jenna paid } \$7.00 \\ - 6.12 \\ \hline \$0.88 \end{array}$$



$$\begin{array}{r} \text{Kim paid } \$8.00 \\ - 7.05 \\ \hline \$0.95 \end{array}$$



$$\begin{array}{r} \text{Tom paid } \$20.00 \\ - 12.85 \\ \hline \$7.15 \end{array}$$

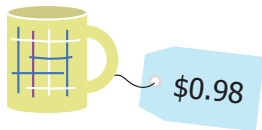


$$\begin{array}{r} \text{Amanda paid } \$7.00 \\ - 6.10 \\ \hline \$0.90 \end{array}$$

# Answer Sheet

## Art Museum Gift Shop

The third grade class at Parkside Elementary went on a trip to the art museum. Some of them bought items from the gift shop. Subtract to figure out how much change each person received.



Elsa paid

$$\begin{array}{r} \$5.00 \\ - 0.98 \\ \hline 4.02 \end{array}$$



Ivan paid

$$\begin{array}{r} \$10.00 \\ - 6.24 \\ \hline \$3.76 \end{array}$$



Ryan paid

$$\begin{array}{r} \$5.00 \\ - 3.57 \\ \hline \$2.03 \end{array}$$



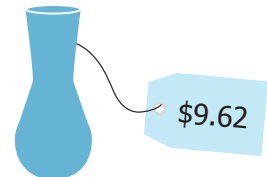
Eric paid

$$\begin{array}{r} \$2.00 \\ - 2.03 \\ \hline \$0.97 \end{array}$$



Elynn paid

$$\begin{array}{r} \$10.99 \\ - 5.99 \\ \hline \$5.00 \end{array}$$



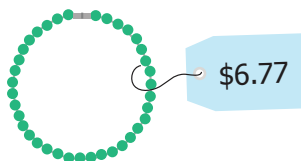
Gene paid

$$\begin{array}{r} \$10.00 \\ - 9.62 \\ \hline \$0.38 \end{array}$$



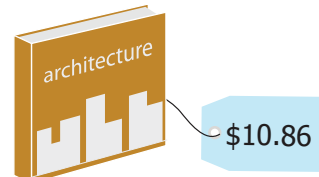
Ann paid

$$\begin{array}{r} \$12.00 \\ - 12.20 \\ \hline \$2.80 \end{array}$$



Joy paid

$$\begin{array}{r} \$7.00 \\ - 6.77 \\ \hline \$0.23 \end{array}$$



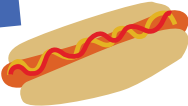
Joanne paid

$$\begin{array}{r} \$11.00 \\ - 10.86 \\ \hline \$0.14 \end{array}$$

# Answer Sheet

## Ballpark Snacks

Kyle and his friends went to the ballpark on Saturday. Each of them bought snacks to eat. Subtract to figure out how much change each person received.

 \$1.97


Kyle paid     \$2.00  
       $\begin{array}{r} - 1.97 \\ \hline 0.03 \end{array}$

 CHIPS \$0.65

Alex paid     \$3.00  
       $\begin{array}{r} 4\ 91 \\ - 3.00 \\ \hline 0.65 \\ \hline \$4.35 \end{array}$

 SODA \$2.20

Jonny paid     \$3.00  
       $\begin{array}{r} 2\ 1 \\ - 2.20 \\ \hline \$0.80 \end{array}$

 \$3.80

Kira paid     \$7.00  
       $\begin{array}{r} 0\ 91 \\ - 3.80 \\ \hline \$6.20 \end{array}$

 \$4.08


Laney paid     \$5.00  
       $\begin{array}{r} 4\ 91 \\ - 4.08 \\ \hline \$0.92 \end{array}$

 \$0.88

Zach paid     \$1.00  
       $\begin{array}{r} 0\ 91 \\ - 0.88 \\ \hline \$0.12 \end{array}$

 water \$2.25

Taylor paid     \$2.00  
       $\begin{array}{r} 2\ 91 \\ - 2.25 \\ \hline \$0.75 \end{array}$

 \$0.54

Anna paid     \$1.00  
       $\begin{array}{r} 0\ 91 \\ - 0.54 \\ \hline \$0.46 \end{array}$

 \$1.20

Kelly paid     \$2.00  
       $\begin{array}{r} 1\ 1 \\ - 1.20 \\ \hline \$0.80 \end{array}$