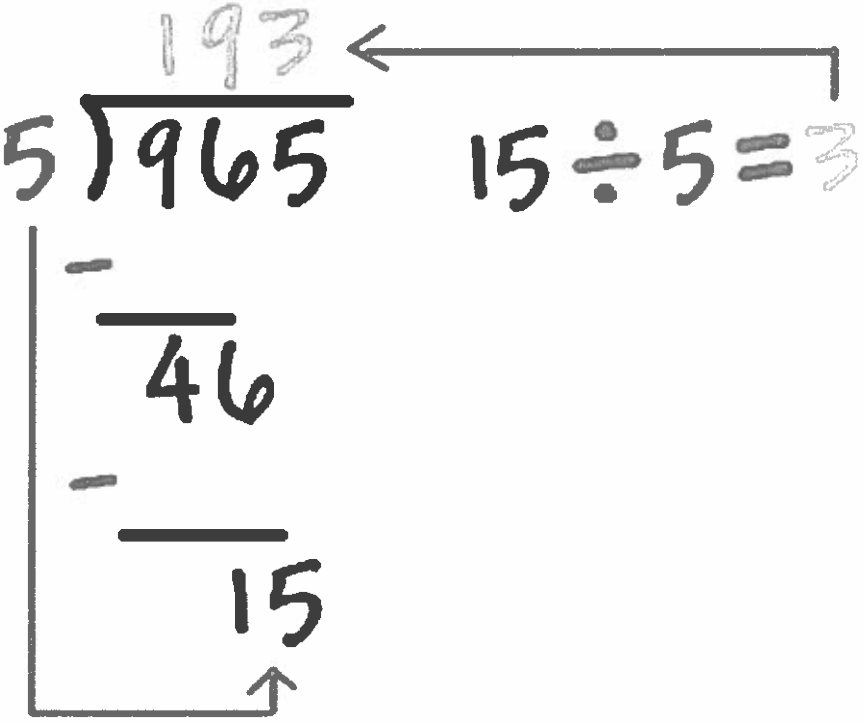
Unit 5

Homelink Packet



Decomposing Fractions

Home Link 5-1

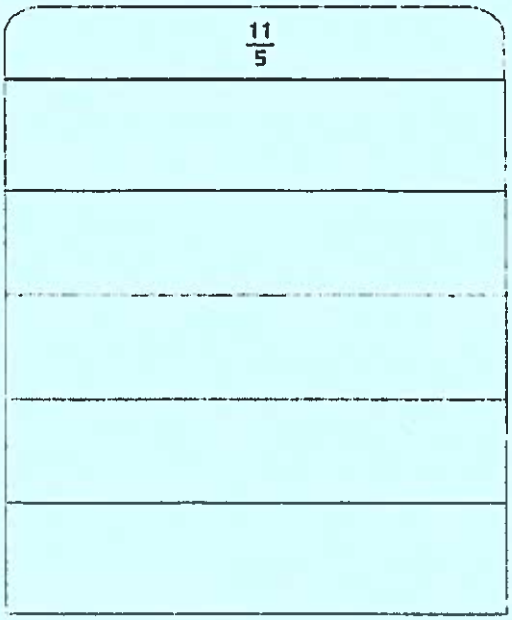
NAME DATE TIME

Family Note In class today your child learned to decompose fractions into smaller parts. For example, $\frac{5}{6}$ can be decomposed into $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$, $\frac{2}{6} + \frac{3}{6}$, $\frac{1}{6} + \frac{4}{6}$, and so on.

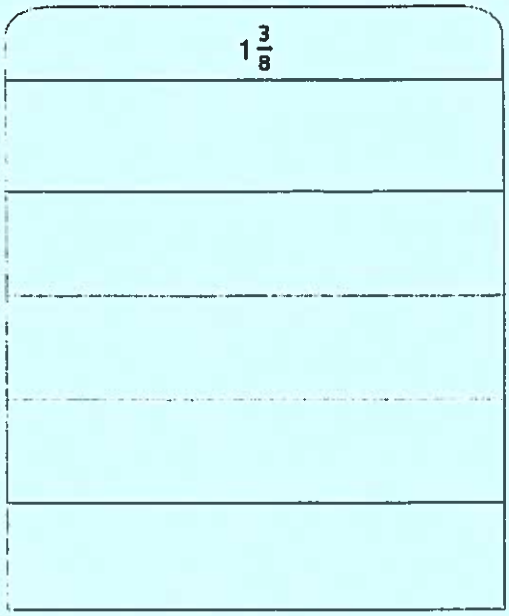
Complete the name-collection boxes using equations.

SRB 125-127

① $\frac{11}{5}$



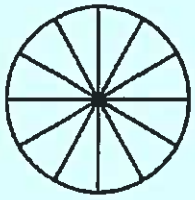
② $1\frac{3}{8}$



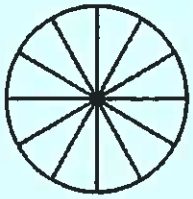
③ Decompose $\frac{8}{12}$ in more than one way into a sum of fractions with the same denominator.

Record each decomposition with an equation and justify it by shading the circle.

a. Equation: _____



b. Equation: _____



Practice

④ 9 * 785 = _____

⑤ 461 * 7 = _____

⑥ 644 * 4 = _____

⑦ _____ = 39 * 50

Use the space on the back to show your work.

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4.	5.
6.	7.

13 − 4	10 − 5	16 − 9	10 − 6	15 − 6	12 − 8	13 − 8	12 − 7
14 − 7	13 − 8	14 − 9	17 − 9	12 − 4	15 − 9	12 − 7	13 − 5
13 − 9	15 − 8	11 − 7	13 − 5	11 − 5	11 − 6	14 − 8	16 − 9
13 − 6	15 − 6	12 − 8	11 − 6	16 − 7	13 − 7	17 − 8	12 − 5

What Is the Whole?

Home Link 5-2

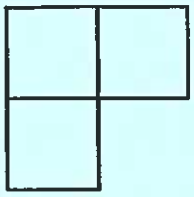
NAME DATE TIME

For Problems 1-3, use your Geometry Template or sketch the shapes.

SRB 125 126

① Suppose is $\frac{1}{4}$. Draw each of the following:

Example: $\frac{3}{4}$ **a.** 1 **b.** $1\frac{1}{2}$ **c.** 2



② Suppose is $\frac{2}{3}$. Draw each of the following:

a. $\frac{1}{3}$ **b.** 1 **c.** $\frac{4}{3}$ **d.** 2

③ Suppose is $\frac{1}{3}$. Draw each of the following:

a. $\frac{3}{3}$ **b.** 2

c. $\frac{5}{3}$ **d.** $1\frac{1}{3}$

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Practice

④ $\frac{4}{5} = \frac{8}{\square}$ ⑤ $\frac{\square}{\square} = \frac{9}{12}$ ⑥ $\frac{9}{10} = \frac{\square}{100}$

Complete the tables. Remember 1,000 grams equals 1 kilogram.

Kilograms	Grams
7	
4	
	10,000
	23,000
45	

Kilograms	Grams
2.5	
	5,500
	12,500
9.5	
11.5	

Solve each problem. Show all your work.

Hadeel bought 6 kg of hamburger, 4 kg of hot dogs, and 7 kg of steak for the picnic she is having this weekend. How many grams of meat did she buy?

The baker needs to purchase more flour. He needs 750 grams of flour to make the vanilla cupcakes, 600 gram to make cookies, and 800 grams to make bread. How many kilograms of flour does he need to purchase?

Adding Fractions

Home Link 5-3

NAME DATE TIME

Solve the number stories. Use a different strategy for each one.

SRB 47, 160, 161

① The park department wants to have new trees planted. They agreed that $\frac{1}{10}$ of the trees will be oak, $\frac{3}{10}$ will be pine, and $\frac{2}{10}$ will be willow. They are undecided about the rest. What fraction of the trees will be oak, willow, or pine?

a. Fill in the whole box.

Whole

b. Number model with unknown: _____

c. One way to solve a fraction addition problem:

d. Answer (with unit): _____

② The Patels have a DVD collection. Three-eighths of the DVDs are animated. Two-eighths of them are mysteries. One-eighth are comedies. The rest are about travel. What fraction of the DVDs are *not* about travel?

a. Fill in the whole box.

Whole

b. Number model with unknown: _____

c. A different way to solve a fraction addition problem:

d. Answer (with unit): _____

Add.

③ $\frac{2}{5} + \frac{1}{5} =$ _____

④ $\frac{1}{2} + \frac{3}{2} =$ _____

⑤ $\frac{5}{6} + \frac{5}{6} =$ _____

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

Practice

Represent the fractions as decimals.

⑦ $\frac{4}{10} =$ _____ ⑧ $\frac{40}{100} =$ _____ ⑨ $\frac{6}{10} =$ _____ ⑩ $\frac{6}{100} =$ _____

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4 × 9	4 × 5	6 × 6	5 × 6	7 × 4	6 × 4	9 × 4	8 × 7	4 × 7
9 × 3	8 × 3	9 × 7	3 × 6	8 × 7	4 × 8	9 × 7	5 × 3	9 × 5
4 × 3	9 × 3	4 × 4	3 × 5	7 × 6	6 × 8	9 × 8	3 × 9	8 × 5
6 × 3	3 × 7	7 × 5	9 × 4	7 × 9	3 × 8	9 × 6	6 × 4	5 × 4
3 × 9	9 × 8	7 × 9	8 × 4	7 × 8	6 × 7	5 × 8	7 × 7	8 × 4

Write an equation to solve each problem.

There are 7 tables in the art room. Eight students can sit at each table. What is the total number of students that can sit at the tables?

We will be making snowmen using cotton balls. We bought 7 bags of cotton balls. If there are 2,000 cotton balls in each bag, how many cotton balls do we have?

Mixed-Number Addition

Home Link 5-4

NAME DATE TIME

SRB 47, 162, 163

Solve the number stories. Use a different strategy for each one.

① The art class had a box filled with balls of yarn. The students used $6\frac{2}{3}$ balls for a project. There are now $2\frac{2}{3}$ balls left in the box. How many balls of yarn did the art class start with?

a. Fill in the whole box.

Whole

b. Number model with unknown:

_____

c. One way to solve a mixed-number addition problem:

d. Answer (with unit): _____

② Mrs. Meyers is growing vines along the sides of her house. On the west side the vines are $2\frac{4}{10}$ meters tall. On the east side the vines are $5\frac{8}{10}$ meters taller than the ones on the west side. How tall are the vines on the east side?

a. Fill in the whole box.

Whole

b. Number model with unknown:

_____

c. A different way to solve a mixed-number addition problem:

d. Answer (with unit): _____

Add. Show your work.

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

④ $1\frac{5}{8} + 2\frac{3}{8} =$ _____

⑤ $3\frac{3}{4} + 2\frac{3}{4} =$ _____

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

Practice

⑦ $837 * 6 =$ _____

⑧ _____ $= 468 * 5$

⑨ _____ $= 364 * 3$

⑩ $56 * 70 =$ _____

Use the space on the back to show your work.

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7.	8.
9.	10.

$6\overline{)54}$ $6\overline{)42}$ $5\overline{)30}$ $8\overline{)56}$ $7\overline{)49}$ $4\overline{)28}$ $7\overline{)63}$ $7\overline{)56}$ $9\overline{)72}$ $9\overline{)54}$

$9\overline{)81}$ $8\overline{)64}$ $6\overline{)48}$ $6\overline{)36}$ $6\overline{)48}$ $5\overline{)40}$ $8\overline{)64}$ $8\overline{)56}$ $6\overline{)54}$ $7\overline{)63}$

$5\overline{)35}$ $9\overline{)54}$ $5\overline{)30}$ $4\overline{)36}$ $6\overline{)42}$ $6\overline{)36}$ $8\overline{)72}$ $7\overline{)49}$ $4\overline{)32}$ $4\overline{)24}$

Adding Tenths and Hundredths

Home Link 5-5

NAME DATE TIME

Use what you know about equivalent fractions to add. Write an equation to show your work.

SRB 166-168

① 2 tenths + 15 hundredths

Equation (in words): _____

② $\frac{68}{100} + \frac{3}{10}$

Equation: _____

③ $\frac{1}{10} + \frac{50}{100}$

Equation: _____

④ $\frac{4}{10} + \frac{60}{100} + \frac{3}{10} + \frac{81}{100}$

Equation: _____

⑤ $1\frac{3}{10} + 5\frac{64}{100}$

Equation: _____

⑥ $3\frac{22}{100} + 2\frac{8}{10}$

Equation: _____

⑦ $\frac{15}{10} + \frac{78}{100}$

Equation: _____

⑧ Nicholas shaded $\frac{40}{100}$ of his hundreds grid. Victor shaded $\frac{5}{10}$ of his grid.

Who shaded more? _____

How much did they shade in all? _____ of a grid

Practice

Write three equivalent fractions.

⑨ $\frac{1}{2} =$ _____

⑩ $\frac{1}{3} =$ _____

⑪ $\frac{1}{4} =$ _____

⑫ $\frac{1}{5} =$ _____

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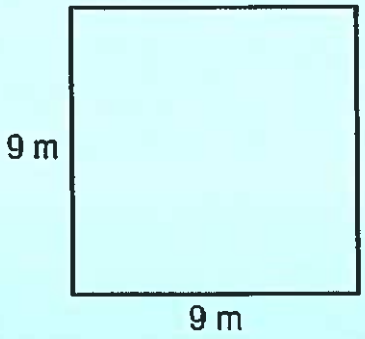
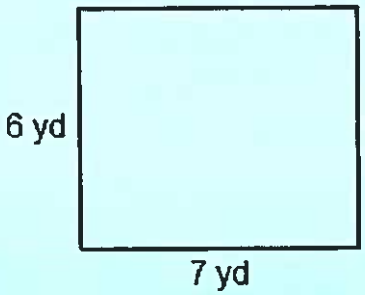
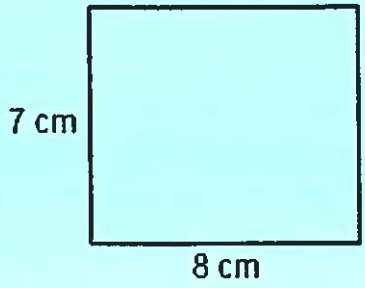
Calculate the area of each rectangle. Write an equation for each. Don't forget the correct units.



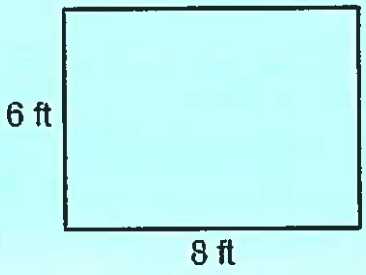
Area: _____



Area: _____



Area: _____



Area: _____

Fraction Error Finder

Home Link 5-6

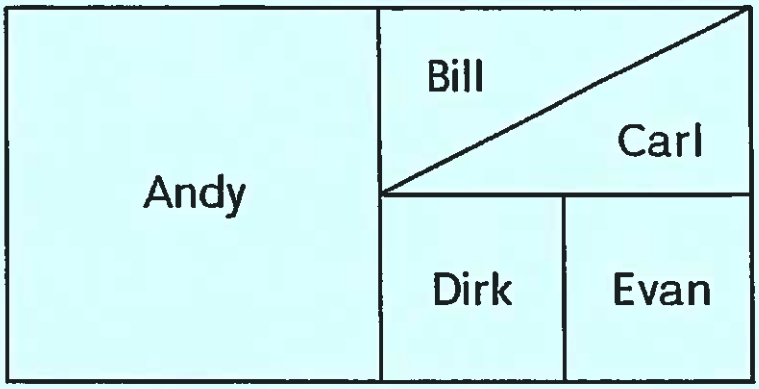
NAME DATE TIME

SRB 166-167

Consider this problem:

A king owns land outside of his castle.

He has partitioned the land to give as gifts to his 5 sons.



What fraction of the land did the king give to each of his sons?

Here is Zeke's solution:

Andy got $\frac{1}{2}$ *Bill got* $\frac{1}{5}$ *Carl got* $\frac{1}{5}$

Dirk got $\frac{1}{8}$ *Evan got* $\frac{1}{8}$

① Identify Zeke's two errors, correct them, and explain why your answer is correct.

② Write a fraction addition equation to represent the correct answers and show the sum of the pieces of land.

Practice

Use U.S. traditional addition and subtraction.

③ 8,936 + 6,796 = _____

④ 635 − 392 = _____

⑤ 6,386 + 4,205 = _____

⑥ 900 − 463 = _____

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9 × 7	5 × 7	7 × 5	6 × 4	8 × 5	3 × 8	3 × 4	9 × 9	9 × 8
6 × 7	5 × 3	7 × 8	6 × 6	3 × 5	4 × 5	5 × 8	4 × 7	4 × 9
5 × 4	5 × 5	6 × 5	8 × 5	7 × 4	5 × 4	4 × 3	5 × 9	5 × 9
8 × 4	5 × 6	3 × 7	6 × 3	7 × 3	3 × 6	6 × 3	3 × 9	8 × 7
8 × 4	5 × 3	7 × 5	9 × 6	4 × 6	6 × 9	3 × 5	3 × 6	8 × 8
6 × 7	4 × 4	3 × 9	4 × 7	3 × 3	8 × 6	8 × 3	9 × 3	7 × 3

Subtracting Fractions

Home Link 5-7

NAME DATE TIME

SRB 160-161

Solve the number stories. Use a different strategy for each one.

① Elijah still had $\frac{4}{5}$ of his allowance at the end of the month. Then he spent $\frac{3}{5}$ of his original allowance on a movie ticket and popcorn. How much of Elijah's allowance was left?

a. Fill in the whole box.

Whole

b. Number model with unknown: _____

c. One way to solve a fraction subtraction problem:

d. Answer (with unit): _____

② Kendra's computer battery had $\frac{9}{10}$ of a charge. After her sister Lydia borrowed the computer, the battery had $\frac{3}{10}$ of a charge left. How much of the battery charge did Lydia use?

a. Fill in the whole box.

Whole

b. Number model with unknown: _____

c. Another way to solve a fraction subtraction problem.

d. Answer (with unit): _____

Subtract.

③ $\frac{2}{2} - \frac{1}{2} =$ _____ ④ $\frac{11}{6} - \frac{4}{6} =$ _____ ⑤ _____ $= 1 - \frac{1}{5}$

Practice

⑥ 8,936 + 6,796 = _____ ⑦ _____ = 4,635 − 2,392

⑧ _____ = 46,386 + 4,205 ⑨ 65,900 − 48,463 = _____

Use the space on the back to show your work.

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6.	7.
8.	9.

List all the factors of each number below.

32: _____

27: _____

23: _____

45: _____

56: _____

Mixed-Number Subtraction

Home Link 5-8

NAME DATE TIME

SRB 164 165

Solve the number stories. Use a different strategy for each one.

① The chocolate chip cake recipe calls for $3\frac{1}{3}$ cups of milk. We only have $1\frac{2}{3}$ cups at home. How much more milk do we need?

Whole

a. Fill in the whole box.

b. Number model with unknown: _____

c. One way to solve a mixed-number subtraction problem:

d. Answer (with unit): _____

② Lourdes is listening to an audio book that is 9 hours long. She has listened for $6\frac{1}{6}$ hours so far. How many hours of listening time are left?

Whole

a. Fill in the whole box.

b. Number model with unknown: _____

c. A different way to solve a mixed-number subtraction problem:

d. Answer (with unit): _____

Subtract. Show your work.

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

④ _____ $= 5\frac{8}{12} - 5\frac{3}{12}$

⑤ $4\frac{2}{5} - 1\frac{4}{5} =$ _____

⑥ _____ $= 9\frac{4}{10} - 3\frac{8}{10}$

Practice

⑦ _____ $= 54 * 10$

⑧ $63 * 100 =$ _____

⑨ $86 * 94 =$ _____

⑩ $5{,}715 * 6 =$ _____

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Round 86,880 to the nearest thousand. _____

Round 148 to the nearest hundred. _____

Round 78,100 to the nearest thousand. _____

Round 843 to the nearest hundred. _____

Round 44,757 to the nearest ten. _____

Round 6,312,850 to the nearest ten thousand. _____

Round 4,919 to the nearest thousand. _____

Round 614,231 to the nearest hundred. _____

Round 945,390 to the nearest hundred thousand. _____

Round 358,379 to the nearest thousand. _____

Mr. Haring told the class that he had approximately 160,000 pennies in a jug. Which answers below could be the exact number of pennies in the jug if he rounded to the nearest ten thousand?

a. 159,294
b. 161,903
c. 159,748
d. 160, 285
e. 159, 572

Student Growth

Home Link 5-9

NAME DATE TIME

Mrs. Welch surveyed her students about how much they had grown over the past year. This is the data she gathered.

SRB 162-163, 214-215

Student Growth Over the Past Year (to the nearest $\frac{1}{2}$ inch)	
$1\frac{1}{2}$	$1\frac{1}{2}$
2	$2\frac{1}{2}$
$2\frac{1}{2}$	2
$\frac{1}{2}$	$1\frac{1}{2}$
$2\frac{1}{2}$	$\frac{1}{2}$
1	2
$1\frac{1}{2}$	2
$1\frac{1}{2}$	$\frac{1}{2}$
$3\frac{1}{2}$	$1\frac{1}{2}$
1	1
1	$2\frac{1}{2}$
2	2
$2\frac{1}{2}$	$1\frac{1}{2}$

① Plot the data set on the line plot.

Title

Label

Use the completed line plot to answer the questions.

② What is the greatest number of inches a student grew in a year?

About _____ inch(es) The least? About _____ inch(es)

③ What is the difference between the greatest and the least number of inches grown?

Number model with unknown: _____ Answer: _____ inch(es)

Practice

Circle the three equivalent fractions in each group.

④ $\frac{1}{4}, \frac{3}{6}, \frac{1}{8}, \frac{2}{8}, \frac{3}{12}$

⑤ $\frac{3}{4}, \frac{4}{8}, \frac{6}{8}, \frac{5}{6}, \frac{9}{12}$

⑥ $\frac{2}{3}, \frac{1}{5}, \frac{4}{6}, \frac{7}{12}, \frac{8}{12}$

⑦ $\frac{1}{2}, \frac{5}{10}, \frac{4}{8}, \frac{7}{12}$

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Write number models with unknowns for each problem.

Greta is selling raffle tickets to raise money for the local animal shelter. During the first week, she sells 7 tickets each day. During the second week, she sells only 3 tickets each day. How many tickets did she sell these two weeks?

_____

_____

Answer: _____

Plain pizza costs $8 and pepperoni pizza costs $12. How much would 4 plain pizzas and 3 pepperoni pizzas cost?

_____

_____

Answer: _____

Rotations

Home Link 5-10

NAME DATE TIME

Family Note If your child needs help with the following problems, consider putting up signs in a room in your home to indicate the directions *north, south, east,* and *west.* Do the turns with your child.

Please return this Home Link to school tomorrow.

SRB 207

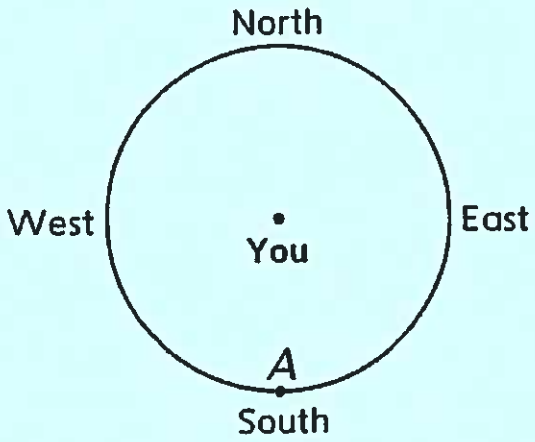
Make the turns described below. Show which way you face after each turn by:

- Drawing a dot on the circle.
- Labeling the dot with a letter.

Example: Face north.

Do a $\frac{1}{2}$ turn counterclockwise.

On the circle, mark the direction you are facing with the letter *A*.



1. Face north. Do a $\frac{1}{4}$ turn clockwise. Mark the direction you are facing with the letter *B*.
2. Face north. Do a $\frac{3}{4}$ turn clockwise. Mark the direction you are facing with the letter *C*.
3. Face east. Do a $\frac{1}{4}$ turn counterclockwise. Mark the direction you are facing with the letter *D*.
4. Face west. Make less than a $\frac{1}{4}$ turn clockwise. Mark the direction you are facing with the letter *E*.
5. Face north. Make a clockwise turn that is more than a $\frac{1}{2}$ turn but less than a $\frac{3}{4}$ turn. Mark the direction you are facing with the letter *F*.
6. Face north. Make a counterclockwise turn that is less than a $\frac{1}{2}$ turn but more than a $\frac{1}{4}$ turn. Mark the direction you are facing with the letter *G*.

Practice

7. $85 * 50 =$ _____
8. $416 * 6 =$ _____
9. _____ = $597 * 4$
10. $1{,}373 * 7 =$ _____

Use the space on the back to show your work.

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7.	8.
9.	10.

$9\overline{)81}$	$8\overline{)72}$	$4\overline{)36}$	$4\overline{)32}$	$3\overline{)21}$	$6\overline{)48}$	$7\overline{)49}$	$9\overline{)72}$
$5\overline{)40}$	$3\overline{)27}$	$7\overline{)56}$	$8\overline{)64}$	$5\overline{)35}$	$9\overline{)63}$	$5\overline{)45}$	$7\overline{)63}$
$8\overline{)56}$	$6\overline{)54}$	$7\overline{)63}$	$3\overline{)24}$	$4\overline{)36}$	$7\overline{)49}$	$9\overline{)63}$	$5\overline{)45}$
$5\overline{)35}$	$9\overline{)72}$	$4\overline{)32}$	$3\overline{)27}$	$9\overline{)81}$	$5\overline{)40}$	$6\overline{)42}$	$8\overline{)64}$
$7\overline{)56}$	$4\overline{)28}$	$3\overline{)21}$	$6\overline{)48}$	$3\overline{)27}$	$9\overline{)72}$	$5\overline{)45}$	$7\overline{)49}$

Estimating Angle Measures

Home Link 5-11

NAME DATE TIME

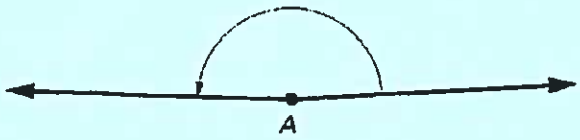
Family Note Our class has been learning about turns, angles, and angle measures. A full turn can be represented by an angle of 360°, a $\frac{1}{2}$ turn by an angle of 180°, a $\frac{1}{4}$ turn by an angle of 90°, and so on. Help your child match the measures below with the angles pictured. (It is not necessary to measure the angles with a protractor.)

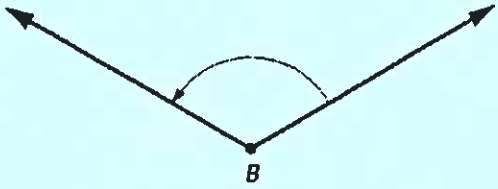
SRB 207

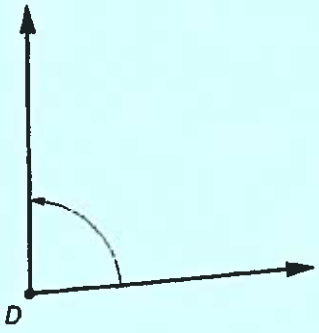
Name which angle has the given measure.

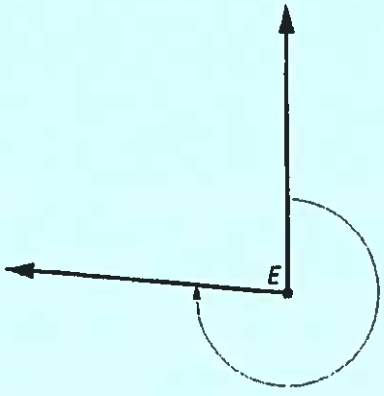
1. about 180° angle _____
2. about 90° angle _____
3. about 270° angle _____
4. between 0° and 90° angle _____
5. between 90° and 180° angle _____

Rotation	Degrees
$\frac{1}{4}$ turn	90°
$\frac{1}{2}$ turn	180°
$\frac{3}{4}$ turn	270°
full turn	360°









Practice

6. 5,956 + 4,983 = _____
7. 60,351 + 86,037 = _____
8. 41,015 − 517 = _____
9. 23,730 − 10,769 = _____

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15 − 9	10 − 4	13 − 7	11 − 5	10 − 6	17 − 8	13 − 6	12 − 4
14 − 9	12 − 5	11 − 7	8 − 4	9 − 5	9 − 4	13 − 9	14 − 5
14 − 8	10 − 5	15 − 7	10 − 6	11 − 4	12 − 7	13 − 5	10 − 4
16 − 8	15 − 6	12 − 6	12 − 7	16 − 9	9 − 5	14 − 6	14 − 8
15 − 9	16 − 9	12 − 8	16 − 7	14 − 9	11 − 4	17 − 9	14 − 7

Solve this problem. Show all of your work.

The football stadium can seat 300,000 people. For Saturday's game, 265,936 tickets were sold. When the game began, 1,758 people that bought tickets had not arrived at the stadium. How many empty seats were there in the stadium?

Folding Shapes

Home Link 5-12

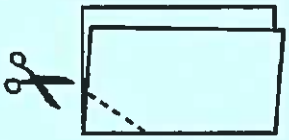
NAME DATE TIME

Family Note Our class has been studying lines of symmetry—lines that divide figures into mirror images. Help your child look for symmetric shapes in books, newspapers, and magazines, and in objects around the house, such as windows, furniture, dishes, and so on.

Please bring your cutouts to school tomorrow.

SRB 238

① Fold a sheet of paper in half. Cut off the folded corner, as shown. Before you unfold the cutoff piece, guess its shape.



a. Unfold the cutoff piece. What shape is it?

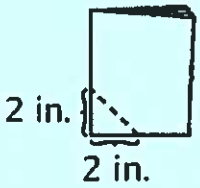
_____

b. How many sides of the cutoff piece are the same length? _____ sides

c. How many angles are the same size? _____ angles

d. The fold is a line of symmetry. Does the cutoff piece have any other lines of symmetry? _____

② Fold another sheet of paper in half. Fold it in half again. Make a mark on both folded edges 2 inches from the folded corner. Cut off the folded corner. Before you unfold the cutoff piece, guess its shape.



a. Unfold the cutoff piece. What shape is it? _____

b. Are there any other lines of symmetry besides the fold lines? _____

c. On the back of this paper, draw a picture of the cutoff shape. Draw all of its lines of symmetry.

Practice

③ $81 \div$ _____ $= 9$

④ _____ $\div 9 = 6$

⑤ $7 = 42 \div$ _____

⑥ _____ $\div 9 = 8$

⑦ $36 \div$ _____ $= 4$

⑧ $8 =$ _____ $\div 6$

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Write two equivalent fractions for each fraction below.

$\frac{3}{4}$

$\frac{5}{8}$

$\frac{2}{9}$

$\frac{4}{7}$

$\frac{5}{6}$

Use your knowledge of fractions to solve this problem.

Dad was making Mom a birthday cake. The recipe called for $2\frac{2}{3}$ cups of sugar, but Dad had only $1\frac{1}{3}$ cups. How many more cups did Dad need to make the cake?

Expressing Answers to Number Stories

Home Link 5-13

NAME DATE TIME

Family Note Today students learned to express solutions to multistep number stories using correct units and single number models. Have your child explain the steps for solving each of the problems below, and then help him or her write these steps as a single number model, including a letter for the unknown quantity.

Solve. Record a long number model with a letter for the unknown quantity and write the answer with the correct unit.

① Guillermo hires two painters to paint the walls of his living room. The painters each make $42 an hour for an 8-hour workday. If the work takes 3 days, how much will Guillermo pay the painters?

Number model with unknown: _____

Estimate: _____

Answer (with unit): _____

② Blaine is on vacation in New York City and wants to collect magnets of places he visits to give to all his friends. The Times Square magnets cost $2 each and come in sets of 4. The Statue of Liberty magnets cost $3 each and come in sets of 5. If Blaine buys 12 sets of each type of magnet, how much will he pay?

Number model with unknown: _____

Estimate: _____

Answer (with unit): _____

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Practice

③ 45 ÷ 5 = _____ ④ 56 ÷ 8 = _____ ⑤ 54 ÷ 9 = _____

⑥ _____ ÷ 9 = 4 ⑦ _____ ÷ 6 = 6 ⑧ _____ ÷ 8 = 3

Multiply using any method you like. Show all your work.

36 * 43 = _____

53 * 48 = _____

465 * 6 = _____

354 * 37 = _____