Subtracting Fractions

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



- 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?
 - Whole Fill in the whole box.
 - Number model with unknown:
 - One way to solve a fraction subtraction problem:
 - Answer (with unit): _____
- Kendra's computer battery had $\frac{q}{10}$ 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?
 - Whole Fill in the whole box.
 - Number model with unknown: _
 - Another way to solve a fraction subtraction problem.
 - Answer (with unit): _____

Subtract.

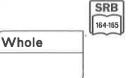
$$\frac{2}{2} - \frac{1}{2} = \underline{\hspace{1cm}}$$

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

Mixed-Number Subtraction

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?



- 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?



- 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.

$$3) \quad 4\frac{1}{2} - 3\frac{1}{2} = \underline{\hspace{1cm}}$$

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

Student Growth

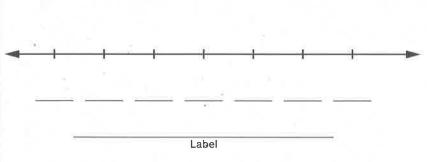
Mrs. Welch surveyed her students about how much they had grown over the past year. This is the data she gathered.



Student G	rowth Over		
the Past Year			
(to the nearest $\frac{1}{2}$ inch)			
$1\frac{1}{2}$	$1\frac{1}{2}$ $2\frac{1}{2}$ 2		
2	$2\frac{1}{2}$		
$ \begin{array}{c} 2 \\ 2\frac{1}{2} \\ \frac{1}{2} \\ 2\frac{1}{2} \end{array} $	2		
1/2	$1\frac{1}{2}$		
$2\frac{1}{2}$	$1\frac{1}{2}$ $\frac{1}{2}$		
1	2		
$1\frac{1}{2}$	2		
1 1 2	1/2		
$1\frac{1}{2}$ $1\frac{1}{2}$ $3\frac{1}{2}$	$\frac{1}{2}$ $1\frac{1}{2}$		
1	1		
1	2 1 /2		
2	2		

1 Plot the data set on the line plot.

Title



Use the completed line plot to answer the questions.

 $1\frac{1}{2}$

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

 $2\frac{1}{2}$

Circle the three equivalent fractions in each group.

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

Rotations

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.

left turn right turn counterclockwise

Please return this Home Link to school tomorrow.

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

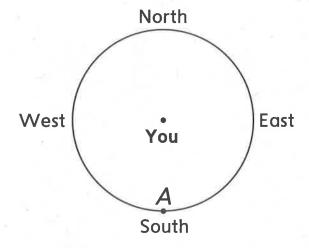


- Drawing a dot on the circle.
- Labeling the dot with a letter.

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

1,373 * 7 = _____

Estimating Angle Measures

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.)

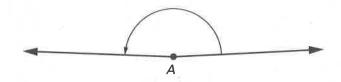
Name which angle has the given measure.

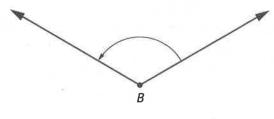
- about 180°
- angle _____

- (2) about 90°
- angle _____
- (3) about 270°
- angle _____
- 4) between 0° and 90°
- angle _____
- 5) between 90° and 180°
- angle ___

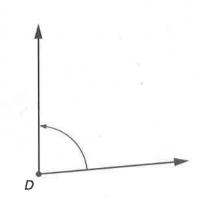
Rotation	Degrees	
$\frac{1}{4}$ turn	90°	
$\frac{1}{2}$ turn	180°	
3/4 turn	270°	
full turn	360°	

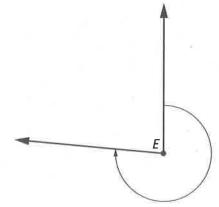












- **6** 5,956 + 4,983 = _____
- **(7)** 60,351 + 86,037 = _____
- **8** 41,015 517 = _____
- 9 23,730 10,769 = _____

NAME

DATE

TIME

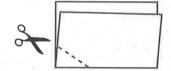
Family Note Our class has been studying lines of symmetry—lines that divide figures into mirror images. Help your child look for symmetric shapes in books, newspapers, and magazines, and in objects around the house, such as windows, furniture, dishes, and so on.

Please bring your cutouts to school tomorrow.

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?



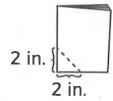
b. How many sides of the cutoff piece are the same length? _____ sides

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.

$$4$$
 $=$ \div $9 = 6$

Expressing Answers to Number Stories

Home Link 5-13		
NAME	DATE	TIME
		81

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.



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): _____

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):

- (3) 45 ÷ 5 = _____ (4) 56 ÷ 8 = ____ (5) 54 ÷ 9 = ____

- (6) === ÷ 9 = 4 (7) == ÷ 6 = 6 (8) == ÷ 8 = 3