Round 'Em Up!

1 Solve the problems below. Show all your work.

2 Round the numbers below to the nearest ten. When you round to the nearest ten, look at the number in the ones place. If it is 5 or higher, round up to the next highest ten. If it is less than 5, keep the number in the tens place the same.

ex a 63 60	ex b 186 190	a 47	b 52
C 35	d 94	e 122	f 856
g 267	h 993	i 1,247	j 2,052

3 Round the numbers below to the nearest hundred. When you round to the nearest hundred, look at the number in the tens place. If it is 5 or higher, round up to the next highest hundred. If it is less than 5, keep the number in the hundreds place the same.

ex a 163 200	ex b 627 600	ex c 82 100	a 203
b 254	c 822	d 439	e 67
f 153	g 764	h 449	i 657



CHALLENGE

4 Write two different numbers that round up or down to each number shown.

ex 400	438	384	a 20	b 80
C 100			d 300	€ 700

Centimeters, Decimeters & Meters

The information below will help you solve Problems 1-3.

- There are 10 centimeters in 1 decimeter.
- There are 10 decimeters in 1 meter.

1a Luis and Sara measured their heights in centimeters. Luis was 132 cm tall, and Sara was 148 cm tall. What is the sum of their heights in centimeters? Show your work.



b What is the sum of their heights in decimeters? Show your work.

2 The snail crawled 1 meter in the morning, 4 decimeters after lunch, and 60 centimeters before falling asleep. How far did the snail crawl altogether? Express your answer in centimeters, decimeters, and meters. Show your work.

a The snail crawled _____ centimeters.

b The snail crawled decimeters.

C The snail crawled _____ meters.



CHALLENGE

3a Sidney Snail crawled two and a half meters in a half hour. Sherman Snail crawled 487 centimeters in an hour. Who crawled farther, Sidney or Sherman? How much farther? Show your work.

b Which snail was faster? Explain your answer.



DATE

Multiples & Multiplication Facts

Week 1 Day 3

1 When you count by a number, you are naming the multiples of that number. For example, if you skip count by 5's, you are naming the multiples of five: 5, 10, 15, 20, 25, and so on. In each sequence below, fill in the missing multiples.

ex 5, 10, 15, <u>20</u> , 25, 30, <u>35</u>	a 3, 6,, 12, 15, 18,, 24
b 6,, 18,, 30	c 9, 18,, 36, 45,, 63

2 Circle all the multiples of the number in each box.

ex	5	16	20	(15)	42	36	45	18	a	2	5	6	7	8	14	21	10
b	4	8	6	14	16	20	28	19	С	7	22	33	21	14	16	42	35
d	8	28	32	48	16	60	72	19	e	3	21	35	18	36	44	12	29

3 Fill in the missing numbers.

$$\begin{array}{c} 3 \\ \times 9 \\ \hline \end{array}$$

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

$$\times 6$$

$$\begin{array}{c} 3 \\ \times \boxed{2} \end{array}$$

$$7$$
 $\times \square$
 $1 \quad 4$

$$\times 5$$
 $3 0$

$$\frac{\times 4}{3 \ 6}$$

$$\begin{array}{c|c}
3 \\
\times \boxed{}\\
1 & 2
\end{array}$$



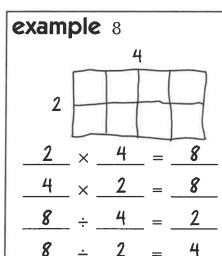
CHALLENGE

$$\begin{array}{c} 6 \\ \times 1 \quad 6 \\ \hline \end{array}$$

Arrays & Factors

Week 1 Day 4

1 Draw and label a rectangular array to show two factors for each number. Do not use 1 as one of your factors. Then write the fact family that goes with your array.



×	·	=	
×		=	
÷		=	
÷	<u> </u>	=	

2 List all the factors of each number below.

ex 12	1, 2, 3, 4, 6, 12	a 16	
b 17		C 24	
d 9		e 36	

3a Circle the prime number(s) in problem 2.

b Draw a square around the square number(s) in problem 2.



CHALLENGE

4 Fill in the missing digits in the problems below.

example

a

$$\begin{array}{c|cccc}
6 & 2 & 3 \\
- & 4 & \\
\hline
1 & 7
\end{array}$$

Number Riddles

Week 1 Day 5

1 Draw a line to show which number matches each description. The first one is done for you.

example This number has a 2 in the thousands place.	46,305
a This is an even number with a 6 in the hundreds place.	32,617
b This number is equal to 30,000 + 4,000 + 80 + 2.	45,052
C This number is 1000 less than 46,052.	19,628
d This is an odd number with a 6 in the thousands place.	34,082

2 Write each number in words.

example 17,329	seventeen thousand, three hundred twenty-nine
a 33,072	
b 86,105	
C 74,629	



CHALLENGE

3 Write an even number that has a 7 in the hundreds place, has an odd number in the thousands place, and is a multiple of 10.

DATE

The Information You Need

Week 1 Day 5

Sometimes story problems include information that you don't need to solve the problem. Read the problems below carefully to see which information is extra.

1 Emilio has \$125. He wants to buy a new video game system that usually costs \$312 but is on sale for \$289. He wants to borrow money from his brother so that he can buy it while it is on sale. How much money will Emilio need to borrow to buy the game system while it is on sale?

- **a** Restate the question in your own words.
- **b** Underline the information in the problem you do need to solve the problem.
- **C** Cross out the information in the problem you *don't* need to solve the problem.
- **d** Solve the problem. Show all your work.

2 Marie had a \$5 bill, three \$1 bills, 2 quarters, and 3 pennies in her pocket. She bought a bottle of juice for 89¢ and an apple for 65¢. If she paid with two \$1 bills, how much change did she get back?

- **a** Restate the question in your own words.
- **b** Underline the information in the problem you do need to solve the problem.
- **C** Cross out the information in the problem you *don't* need to solve the problem.
- **d** Solve the problem. Show all your work.

Egg Carton Fractions

1 Solve the following multiplication and division problems. They might help you think about the egg cartons in problem 2.

$$12 \div 2 =$$
 $12 \div 3 =$ $12 \div 4 =$ $12 \div 6 =$ $12 \div 6 =$

$$12 \div 3 =$$

$$12 \div 4 =$$

$$12 \div 6 =$$

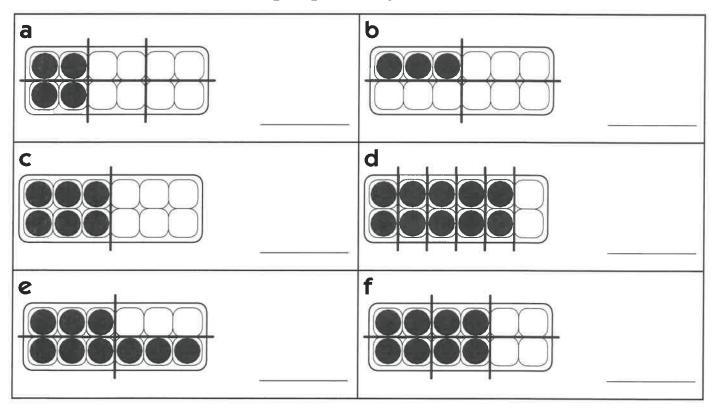
$$6 \times 3 =$$

$$4 \times 2 =$$

$$3 \times 3 =$$

$$6 \times 3 =$$
 $2 \times 5 =$ $2 \times 5 =$

2 Write a fraction to show the amount of each egg carton that is filled with eggs. The cartons are divided into equal parts for you.



3 Write greater than (>) or less than (<) to show which fraction is greater. If they are equal, write an equal sign (=).

ex	$\mathbf{A} = \frac{1}{4}$	< ½ 2 <p></p>	$ ex b \frac{1}{2} > \frac{1}{3}$	a $\frac{4}{6}$ $\frac{2}{3}$
b	1/3	$\frac{1}{4}$	C $\frac{3}{4}$ $\frac{5}{6}$	d $\frac{1}{3}$ $\frac{3}{4}$
e	1/2	2/4	$f_{\frac{2}{3}}$ $\frac{3}{4}$	$g_{\frac{2}{6}}$ $\frac{1}{3}$

DATE

Using Partial Products to Solve Multiplication Problems Week 2 Day 2

Use partial products to solve each multiplication problem below.

Fill in the array to show the partial products.	Use numbers to show your work.
example $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} 23 \\ \times 6 \\ 6 \times 20 = 120 \\ 6 \times 3 = +18 \\ \hline 138 \end{array} $
1 7	24 × 7
36	36 × 6
4	47 × 4

Using the Standard Multiplication Algorithm Week 2 Day 3

1 Use the standard algorithm to solve each multiplication problem.

ex	2 34 × 7 238	а	43 × 6	Ь	28 × 4	С	59 × 4
d	37 × 3	e	84 × 3	f	33 × 8	g	68 × 5

2 Solve the problems below using the standard algorithm. Show your work.

ex 164 × 3 492	a 137 × 3	b 382 × 7	C 485 × 6
d 146	232	f 143	g 406 × 5
× 4	× 6	× 5	



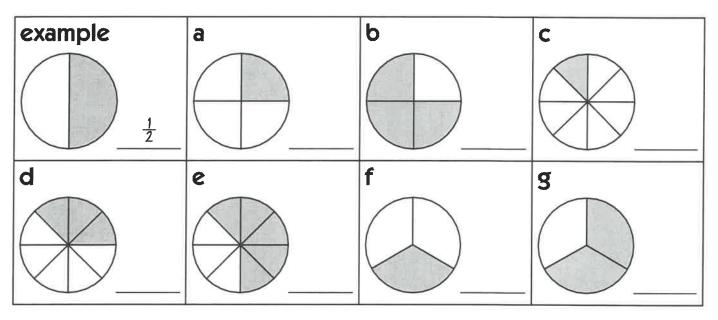
CHALLENGE

h	1,243 × 5	i 3,531 × 4	j 4,325 × 4	k 3,478 × 9
---	--------------	----------------	-----------------------	--------------------

More Fractions & Division

Week 2 Day 4

1 Write a fraction to show how much of each circle is filled in.



2 Solve the following division problems. The answers can help you with problem 3.

$$24 \div 2 =$$
 $24 \div 4 =$ $24 \div 8 =$ $24 \div 3 =$

$$24 \div 3 =$$

$$240 \div 4 =$$

$$240 \div 2 =$$
 _____ $240 \div 4 =$ ____ $240 \div 8 =$ ____ $240 \div 3 =$ ____

3 You can use what you know about division to find different fractions of a number.

example Half of 24 is _____12___.

a One-third of 24 is _____.

b One-eighth of 24 is ______

C One-fourth of 24 is _____.

d One-third of 240 is _____.

e Half of 240 is _____.

f One-eighth of 240 is _____.

9 One-fourth of 240 is _____.

CHALLENGE

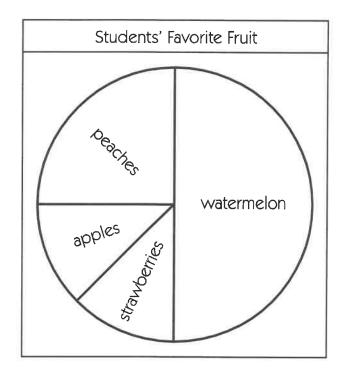
h Three-fourths of 24 is

i Two-thirds of 240 is ______.

Favorite Fruit Graph

The people working in the cafeteria wanted to know what fruit students like best. They asked the 240 students in the school to pick their favorite fruit. The results are shown on the circle graph below.

- 1 Which was the most popular fruit?
- **2** Did more students select peaches or apples?
- **3** Which two fruits are favored by the same number of students?

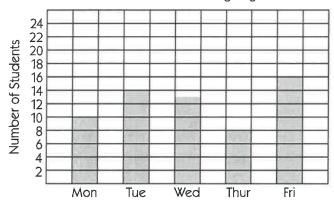


- **4** Exactly half of the students said watermelon was their favorite fruit. What *number* of students said watermelon was their favorite fruit? (There are 240 students altogether.) Show your work.
- **5** Exactly one-fourth of the students said peaches were their favorite fruit. What *number* of students said peaches were their favorite fruit? Show your work.
- **6** Exactly one-eighth of the students said strawberries were their favorite fruit. What *number* of students said strawberries were their favorite fruit? Show your work.

Eating Our Vegetables

1 Mrs. Watson's class is trying to eat more vegetables at lunch. This bar graph shows how many students in her class ate vegetables each day for a week.

Number of Students Eating Vegetables



- **a** How many students does each box on the graph represent?
- **b** How many students ate vegetables on Friday?
- **C** How many students ate vegetables on Wednesday?
- **d** There are 24 students in the class. On which day(s) did at least half of the class eat vegetables?



CHALLENGE

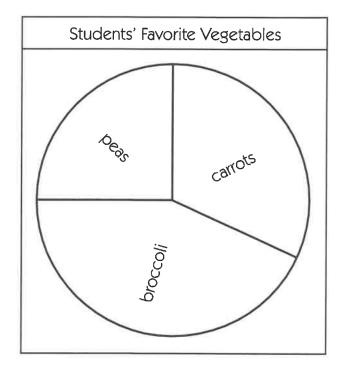
• On which day did exactly twothirds of the class eat vegetables? Explain your answer.

Week 2 Day 5



CHALLENGE

2 Two hundred forty students were asked to choose their favorite vegetable. This circle graph shows the results. Exactly one-fourth of the students picked peas, and exactly one-third picked carrots. How many students said broccoli was their favorite vegetable? Use labeled sketches, numbers, and/or words to explain your answer.

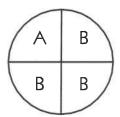


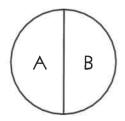
Fair Spinners

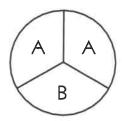
Week 3 Day 1

1a Amber and Brandon are going to play a game. They are using a spinner to see who gets to go first. If the spinner lands on A, Amber goes first. If the spinner lands on B, Brandon goes first. Circle the spinner that gives each player the same chance of going first.

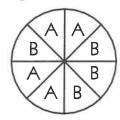




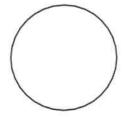




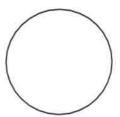
b Brandon didn't think the spinners above were very interesting, so he made the spinner shown below. Is this spinner fair? Explain your answer.



2a Willie, Brett, and Rico are playing a game. They need to make a spinner to decide who gets a point each time. Willie gets a point if the spinner lands on white. Brett gets a point if the spinner lands on blue. Rico gets a point if the spinner lands on red. Sketch a spinner that would be fair for these 3 players. Then explain why it is fair.



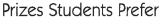
b Sketch a different spinner that would be fair for the 3 players. Explain why it is fair.

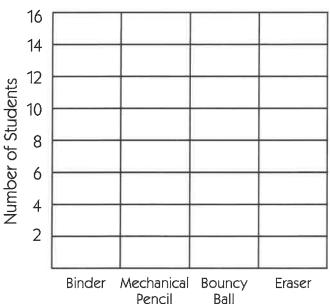


Prizes for Student Helpers

1 Mr. Murphy's students are going to win prizes for helping out around the school. He wants to find out what prizes his students like best so that he can buy them this weekend. The table below shows the results of his survey. Use the table to fill in the bar graph.

Prize	Number of Students		
Binder	9		
Mechanical Pencil	12		
Bouncy Ball	6		
Eraser	5		





Week 3 Day 1

2 Mr. Murphy bought the following prizes for his students. Fill in the total price for each kind of prize.

Prize	Number Bought	Price Each	Total Price
a Binder	5	\$4.99	
b Mechanical Pencil	20	\$2.00	
C Bouncy Ball	10	\$0.65	
d Eraser	5	\$0.25	

3 Use the information in the table to figure out how much Mr. Murphy spent altogether. Show all your work.

Calendar Problems

Week 3 Day 2

Use the calendars below to help solve the problems.

February							
Sun	Mon	Tues	Wed	Thurs	Fri	Sat	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	

	March							
Sun	Мол	Tues	Wed	Thurs	Fri	Sat		
1	2	3	4	5	6	7		
8	9	10	11	12	13	14		
15	16	17	18	19	20	21		
22	23	24	25	26	27	28		
29	30	31						

			April			
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

1 Today is February 15. Hannah's birthday is on April 6. She told her teacher that her birthday is in about 5 weeks. Is that a good estimate? Explain your answer.

2 It takes 3 weeks for a video game to be mailed to Carlos. If he wants to get the video game in time for his brother's birthday on March 26, what is the last day he could order the video game and still get it in time?

3 Ling got a new puppy 26 days ago. Today is April 17. When did Ling get her puppy?

4 Bob says that he mailed a letter to his grandma about two weeks ago. Today is March 11. Fill in the bubble to show the date when Bob could have mailed the letter.

O March 24

O February 18

O February 26

O March 4



CHALLENGE

5 There are 31 days in the month of May. How many Sundays will there be in the May that comes after April shown above?

Dog Bone Graph

A pictograph uses pictures or symbols to show numbers of things. A pet store owner used a pictograph to keep track of how many dog bones she sold each day. Use the pictograph to answer the questions below.

Number of Dog Bones Sold Each Day

Monday	3-3	3-3	1		
Tuesday	-	9-8	3-8	3 m	
Wednesday	3-6	3-8	3—8	3-3	
Thursday	3	3-8			
Friday	1	1	1-8	3-4 3-	

Key – 10 Bones

- 1 How many bones does each bone picture stand for?
- 2 How many bones does each half-bone picture stand for?
- 3 On which day were the most bones sold?
- 4 How many bones were sold on Tuesday?
- **5** How many bones were sold altogether this week, from Monday to Friday? Show all your work.



CHALLENGE

6 The pet store owner sold half as many dog bones last week as she did this week. How many bones were sold last week? (The pictograph shows the bones sold this week.) Show your work.

Find the Missing Information

Week 3 Day 4

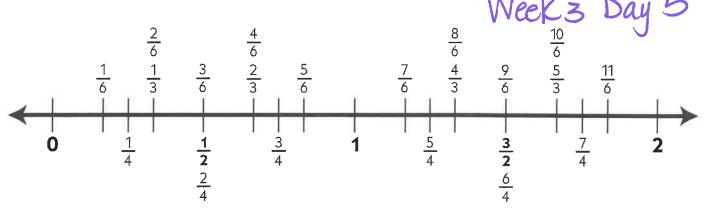
Each problem below is missing some information that you need to solve it. For each problem, select the information you need to solve it. Then solve the problem.

- **1** Miguel is getting groceries. He got a loaf of bread, a carton of milk for \$2.50, and 3 apples that cost 60¢ each. If he pays with a \$10 bill, how much change will he get back?
- **a** Fill in the bubble beside the information you need to solve the problem.
- () The loaf of bread had 20 slices.
- The bread cost \$2.
- Miguel is 11 years old.
- **b** Solve the problem. Show all your work.

- 2 Lisa wants to put carpet squares on the floor in her bedroom. Each carpet square covers 1 square foot, and they cost \$5 for a package of 4 squares. How much will it cost Lisa to buy enough carpet squares to cover her bedroom floor?
- **a** Fill in the bubble beside the information you need to solve the problem.
- Lisa has \$200 to spend.
- Lisa's room is 9 ft. by 11 ft.
- The squares come in cases of 20 packages.
- **b** Solve the problem. Show all your work.

DATE

Using Fractions on a Number Line to Solve Problems



1 Use the number line above to help answer these questions.

a Celia ran $\frac{5}{6}$ of a mile. Jade ran $1\frac{1}{4}$ mile. Who ran farther?

b Lester has a piece of rope that is $\frac{9}{6}$ of a foot long. Dario has a piece of rope that is $1\frac{1}{3}$ of a foot long. Whose piece of rope is longer?

C Table A is $1\frac{2}{3}$ of a yard long. Table B is $\frac{11}{6}$ of a yard long. Which table is longer?

2 Put the following fractions in order from smallest to greatest. Hint: *Think about landmarks*. Which fractions are less than one-half? Which fractions are close to 1?

Least Greatest

3 Think about landmarks like one-half and one to compare the fractions below. Use a greater than (>) or less than (<) sign to compare them.

ex	$\frac{3}{4}$	$> \frac{1}{3}$	a	3 6	3 4	b	<u>5</u>	3 4	С	5 6	2/3
d	<u>5</u> 4	<u>5</u> 6	e	<u>5</u> 4	4/3	f	<u>11</u> 6	<u>5</u>		3 10/9	101 100

Answer Key 4th Grade Math

Page 9, Round 'Em Up!

- 6,814; 1,006; 7,045; 4,275
- 50
 - 50
 - 40
 - 90
 - 120
 - 860
 - 270 3
 - 990 h

 - i 1,250
 - 2,050
- 200 а
 - 300 Ь
 - 800

d

- 400 100 9
- 200
- 800 9
- h 400
- 700
- 4 a-e (challenge) Solutions will vary.

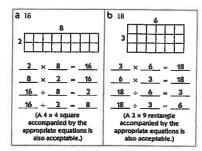
-Page 10, Centimeters, Decimeters & Meters

- 280 centimeters
 - 28 decimeters
- a 200
 - h 20
 - C
- a (challenge) Sherman crawled 237 cm farther than Sidney.
 - **b** (challenge) Explanations will vary. Example: Sidney was faster because he would have gone 5 meters or 500 cm in an hour.

age 15, Multiples & Multiplication Facts

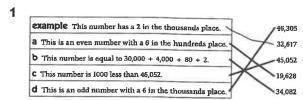
- a 9, 21
- **b** 12, 24
- c 27, 54
- a 6, 8, 14, 10 should be circled.
- **b** 8, 16, 20, 28 should be circled.
- c 21, 14, 42, 35 should be circled.
- d 32, 48, 16, 72 should be circled.
- e 21, 18, 36, 12 should be circled.
- 81, 27, 16, 12, 56
 - 8, 2, 6, 9, 4
 - (challenge) 12, 24, 48, 96, 192

Page 17, Arrays & Factors



- **2 a** 1, 2, 4, 8, 16
 - **b** 1, 17
 - **c** 1, 2, 3, 4, 6, 8, 12, 24
 - **d** 1, 3, 9
 - e 1, 2, 3, 4, 6, 9, 12, 18, 36
- 3 a 17 should be circled.
 - **b** 16, 9, and 36 should have squares around them.
- **a** (challenge) 306 + 398 = 704
 - **b** (challenge) 623 446 = 177

Page 29, Number Riddles



- 2 a Thirty-three thousand, seventy-two
 - b Eighty-six thousand, one hundred five
 - c Seventy-four thousand, six hundred twenty-nine
- 3 (challenge) Answers will vary. Example: 5,730

Page 40, The Information You Need

- Emilio has \$125. He wants to buy a new video game system that usually costs \$312 but is on sale for \$289. He wants to borrow money from his brother so that he can buy it while it is on sale. How much money will Emilio need to borrow to buy the game system while it is on sale?
 - a Responses will vary. Example: How much money does Emilio need to borrow?
 - **b&c** See above.
 - **d** \$164.00
- 2 Marie had a \$5 bill, three \$1 bills, 2 quarters, and 3 pennies in her pocket. She bought a bottle of juice for 89¢ and an apple for 65¢. If she paid with two \$1 bills, how much change did she get back?
 - a Responses will vary. Example: How much change did Marie get?
 - **b&c** See above.
 - d 46¢

Answer Key 4th Grade Math Week Z

Page 44, Egg Carton Fractions

- 1 6, 4, 3, 2
 - 18, 8, 9, 10
- 2 a $^{2}/_{6}$
- **b** 1/4
 - ,,
 - c 1/2 d 5/6
 - . 3/
 - e 3/4
 - **f** 4/6
- 3 a $\frac{4}{6} = \frac{2}{3}$
 - $b^{-1}/_3 > ^{1}/_4$
 - $c^{3/4} < \frac{5}{6}$
 - d $^{1}/_{3} < ^{3}/_{4}$
 - $e^{-1/2} = \frac{2}{4}$
 - $f^{2}/_{3} < ^{3}/_{4}$
 - $g^{-2}/_6 = \frac{1}{3}$

Page 66, Using Partial Products to Solve Multiplication Problems

_	24	24 × 7
7	20 x 7 x 4 140 7 x 4 28	7 x 20 = 140 7 x 4 = +28 166
	36	36 × 6
6	30 6 x 6 x 6 180 36	6 x 30 = 180 6 x 6 = + 36 216
4:	47 40 x4 x4 47 450 28	47 × 4 4 × 40 = 160
•	160 28	4 x 7 = ± 28 188

Page 68, Using the Standard Multiplication Algorithm

- **1 a** 258
- 2 a 411
- **b** 112
- **b** 2,674
- **c** 236
- c 2,910
- **d** 111
- d 584e 1,392
- e 252f 264
- f 715
- . 201
- **g** 340
- **g** 2,030
- h (challenge) 6,215
- i (challenge) 14,124j (challenge) 17,300
- k (challenge) 31,302

Page 81, More Fractions & Division

- 1 a 1/4
 - **b** 3/4
 - C 1/8
 - d 3/8
 - e 5/8
 - f 1/3
 - **g** ²/₃
- 2 12, 6, 3, 8

120, 60, 30, 80

- 3 a 8
 - **b** 3
 - **c** 6
 - **d** 80
 - e 120
 - **f** 30
 - **g** 60
 - h (challenge) 18
 - i (challenge) 160

Page 82, Favorite Fruit Graph

- 1 Watermelon
- 2 Peaches
- 3 Apples and strawberries
- 4 120 students
- 5 60 students
- 6 30 students

Page 85, Eating Our Vegetables

- 1 a 2 students
 - b 16 students
 - c 13 students
 - d Tuesday, Wednesday, and Friday
 - e (challenge) Friday; explanations will vary. Example: ¹/₃ of 24 is 8, so ²/₃ of 24 would be 16. Sixteen kids ate vegetables on Friday.
- 2 100 students; explanations will vary. Example:

$$^{1}/_{4} + ^{1}/_{3} = ^{7}/_{12}$$

$$^{12}/_{12} - ^{7}/_{12} = ^{5}/_{12}$$

$$240 \div 12 = 20$$

$$20 \times 5 = 100$$

4th Grade Math Answer key Week 3

Page 86, Fair Spinners

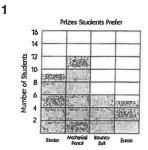
- 1 a Choice 3, the half and half spinner
 - **b** Yes; explanations will vary. Example: 4 parts of the spinner are labeled A and 4 parts are labeled B. The parts are the same size, so it's fair.
- 2 a Responses will vary. Example: If you split the spinner into 3 equal parts, each boy has an equal chance.



2 b Responses will vary. Example: Split the spinner into 6 equal parts, and give each color 2 parts. That way, each boy has a 2 out of 6 chance of landing on his color.



Page 89, Prizes for Student Helpers



- 2 a \$24.95
 - **b** \$40.00
 - c \$6.50
 - **d** \$1.25
- 3 \$72.70; students' work will vary.

Page 91, Calendar Problems

- 1 Answers and explanations will vary. Example: No. If you check the calendar, it's 7 weeks and 1 day until Hannah's birthday.
- 2 Thursday, March 5th
- 3 Sunday, March 22nd
- 4 February 26 (third bubble)
- 5 (challenge) Five Sundays

Page 92, Dog Bone Graph

- 1 10 bones
- 2 5 bones
- 3 Friday
- 4 35 bones
- 5 170 bones
- 6 (challenge) 85 bones

Page 99, Find the Missing Information

- 1 a The bread cost \$2. (second bubble)
 - **b** \$3.70
- 2 a Lisa's room is 9 ft. by 11 ft. (second bubble)
 - **b** Lisa will need 25 packages of carpet squares, even though there will be one square left over. It will cost her \$125.

Page 103, Using Fractions on a Number Line to Solve Problems

- 1 a Jade
 - **b** Lester's
 - c Table B
- 2 1/12, 1/4, 1/2, 3/4, 7/8, 7/6
- 3 a $\frac{3}{6} < \frac{3}{4}$
 - **b** $\frac{5}{6} > \frac{3}{4}$
 - $c^{5/6} > \frac{2}{3}$
 - d $\frac{5}{4} > \frac{5}{6}$
 - e 5/4 < 4/3
 - $f^{11}/_6 > \frac{5}{3}$
 - **g** (challenge) $^{10}/_{9} > ^{101}/_{100}$