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SPECTRUM®

Math

Grade 5

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Table of Contents Grade 5

Chapter 1 Multiplying and Dividing Whole Numbers

Chapter 1 Pretest 5
Lessons 1–5 7–12
Chapter 1 Posttest 13

Chapter 2 Understanding Place Value

Chapter 2 Pretest 15
Lessons 1–10 17–26
Chapter 2 Posttest 27

Chapter 3 Using Decimals

Chapter 3 Pretest 29
Lessons 1–13 31–43
Chapter 3 Posttest 44

Chapter 4 Understanding Fractions

Chapter 4 Pretest 46
Lessons 1–11 48–58
Chapter 4 Posttest 59

Chapter 5 Adding and Subtracting Fractions

Chapter 5 Pretest 61
Lessons 1–6 63–73
Chapter 5 Posttest 74

Chapters 1–5 Mid-Test 76

Table of Contents, continued

Chapter 6 Multiplying and Dividing Fractions

Chapter 6 Pretest 80
Lessons 1–7 82–90
Chapter 6 Posttest 91

Chapter 7 Understanding Mathematical Expressions

Chapter 7 Pretest 93
Lessons 1–5 95–102
Chapter 7 Posttest 103

Chapter 8 Measurement Concepts

Chapter 8 Pretest 105
Lessons 1–9 107–120
Chapter 8 Posttest 121

Chapter 9 Geometry

Chapter 9 Pretest 123
Lessons 1–5 125–130
Chapter 9 Posttest 131

Chapter 10 Graphing

Chapter 10 Pretest 133
Lessons 1–3 135–139
Chapter 10 Posttest 140

Chapters 1–10 Final Test 142

Scoring Record for Posttests, Mid-Test, and Final Test 147
Grade 5 Answers 148–160

NAME _____

Check What You Know

Multiplying and Dividing Whole Numbers

Multiply.

	a	b	c	d
1.	49 × 35	380 × 22	816 × 32	276 × 80
2.	2714 × 52	5216 × 16	177 × 402	818 × 321
3.	445 × 176	3420 × 634	5867 × 382	6334 × 257

Divide.

	a	b	c	d
4.	$3\overline{)762}$	$7\overline{)423}$	$72\overline{)216}$	$33\overline{)594}$
5.	$24\overline{)671}$	$63\overline{)887}$	$45\overline{)6075}$	$89\overline{)3299}$
6.	$92\overline{)8147}$	$14\overline{)3315}$	$76\overline{)2647}$	$17\overline{)8451}$

NAME _____

Check What You Know

SHOW YOUR WORK

Multiplying and Dividing Whole Numbers

Solve each problem.

7. A video game company can fit 535 boxes of games into a truck. If the company has 47 full trucks, how many games does it have total?

The company has _____ games total.

7.

8. Sally bought 1,425 crayons that came in packs of 15. How many packs of crayons did Sally buy?

Sally bought _____ packs.

8.

9. Each day, 1,035 new apps are uploaded to a web server. After 28 days, how many apps would have been uploaded?

_____ apps would have been uploaded.

9.

10. An art museum has 1,042 pictures to split equally into 45 different exhibits. How many more pictures does the museum need to make sure each exhibit has the same amount?

The museum needs _____ more pictures.

10.

11. Robin is making bead necklaces. She wants to use 717 beads to make 57 necklaces. If she wants each necklace to have the same number of beads, how many beads will she have left over?

She will have _____ beads left over.

11.

12. Each day, the gum ball machine in the mall sells 919 gum balls. How many gum balls would it have sold after 160 days?

It would have sold _____ gumballs.

12.

NAME _____

Lesson 1.1 Multiplying 2 and 3 Digits by 2 Digits

Multiply right to left.

$$\begin{array}{r} {\scriptstyle 2}\,24 \\ \times\ \ 7 \\ \hline 168 \end{array}$$

If $24 \times 3 = 72$, then $24 \times 30 = 720$.

$$\begin{array}{r} 24 \\ \times\ 37 \\ \hline 168 \\ +720 \\ \hline 888 \end{array} \qquad \begin{array}{r} {\scriptstyle 1}\,24 \\ \times\ 30 \\ \hline 720 \end{array}$$

Multiply right to left.

$$\begin{array}{r} 427 \\ \times\ \ 1 \\ \hline 427 \end{array} \qquad \begin{array}{r} 427 \\ \times\ \ 61 \\ \hline 427 \\ +25620 \\ \hline 26{,}047 \end{array} \qquad \begin{array}{r} {\scriptstyle 1\ 4}\,427 \\ \times\ \ 60 \\ \hline 25620 \end{array}$$

Multiply.

	a	b	c	d	e	f
1.	43×42	75×12	52×28	36×91	16×77	21×13
2.	24×87	62×54	96×32	18×47	33×79	45×63
3.	26×53	39×74	44×81	473×64	856×22	375×49
4.	838×58	266×93	372×46	659×78	428×37	235×86
5.	907×33	415×27	364×82	547×54	739×62	697×76

NAME _____

Lesson 1.2 Multiplying 4 Digits by 1 and 2 Digits

Multiply from right to left.

$2 \times 7 = 14 + 2 = 16$
$3 \times 7 = 21 + 1 = 22$

$$\begin{array}{r} 3236 \\ \times \quad 7 \\ \hline 22{,}652 \end{array}$$

$6 \times 7 = 42$
$3 \times 7 = 21 + 4 = 25$

$$\begin{array}{r} 7198 \\ \times \quad 14 \\ \hline 28792 \\ +\ 71980 \\ \hline 100{,}772 \end{array}$$

$$\begin{array}{r} 7198 \\ \times \quad 4 \\ \hline 28792 \end{array}$$

$$\begin{array}{r} 7198 \\ \times \quad 10 \\ \hline 71980 \end{array}$$

If $7{,}198 \times 1 = 7{,}198$,
then
$7{,}198 \times 10 = 71{,}980$.

Multiply.

	a	b	c	d	e
1.	2763×5	6204×7	3221×4	8634×8	7253×6
2.	4728×4	3962×9	1854×2	5273×6	4456×3
3.	7526×3	9428×2	3725×28	6414×37	2889×41
4.	5297×64	4175×23	8052×46	2988×85	6364×92
5.	3562×27	7451×54	1920×83	9163×72	4276×56

NAME _____

Lesson 1.3 Dividing 3 Digits by 2 Digits

$71 \div 14 = 5$ remainder 1

$14 \times 5 = 70$

$$\begin{array}{r} 5 \\ 14\overline{)718} \\ -\ 70 \\ \hline 18 \end{array}$$

The quotient is 51.
The remainder is 4.

$18 \div 14 = 1$ remainder 4

$$\begin{array}{r} 51 \\ 14\overline{)718} \\ -\ 70 \\ \hline 18 \\ -\ 14 \\ \hline 4 \end{array}$$

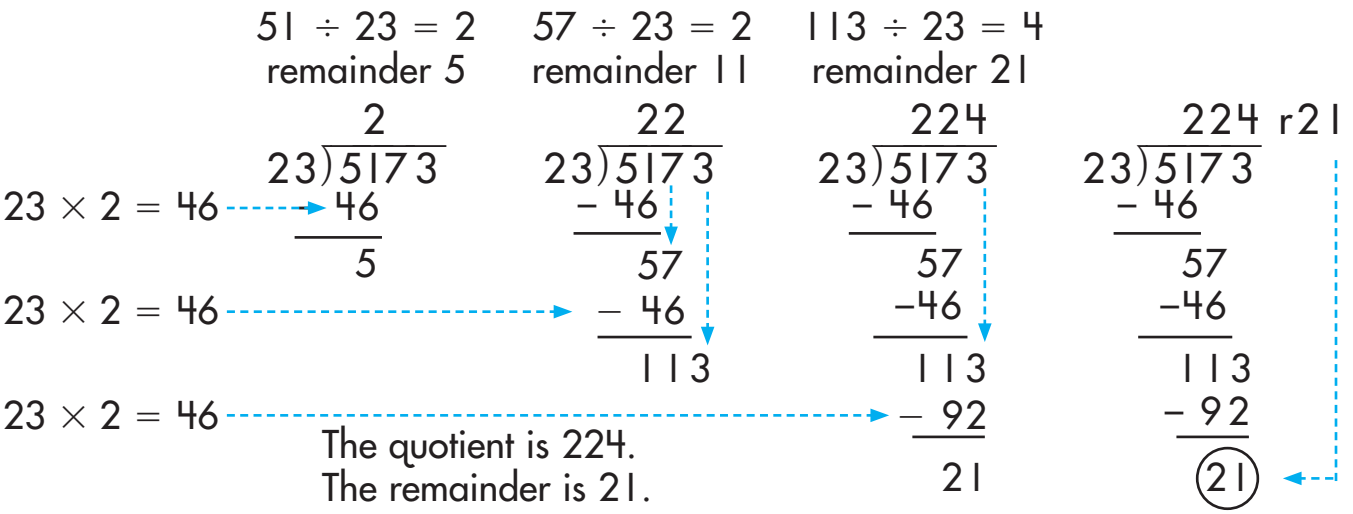
$$\begin{array}{r} 51\ r4 \\ 14\overline{)718} \\ -\ 70 \\ \hline 18 \\ -\ 14 \\ \hline 4 \end{array}$$

Divide.

	a	b	c	d
1.	$23\overline{)264}$	$32\overline{)571}$	$81\overline{)724}$	$52\overline{)328}$
2.	$61\overline{)488}$	$35\overline{)175}$	$82\overline{)362}$	$47\overline{)719}$
3.	$97\overline{)891}$	$26\overline{)423}$	$43\overline{)916}$	$57\overline{)649}$

NAME _____

Lesson 1.4 Dividing 4 Digits by 2 Digits



Divide.

	a	b	c	d
1.	$43\overline{)6571}$	$22\overline{)8294}$	$62\overline{)3628}$	$88\overline{)4773}$
2.	$56\overline{)2829}$	$89\overline{)4340}$	$75\overline{)8195}$	$29\overline{)4872}$
3.	$63\overline{)1890}$	$31\overline{)6263}$	$96\overline{)5379}$	$48\overline{)7246}$

NAME _____

Lesson 1.5 Problem Solving

SHOW YOUR WORK

Solve each problem.

1. At the Bead Shop, there are 25 rows of beads. If there are 320 beads in each row, how many beads are in the shop?

There are _____ beads in the shop.

1.

2. The cafeteria planned to bake 3 cookies for every student in the school. If there are 715 students, how many cookies does the cafeteria need to bake?

The cafeteria needs to bake _____ cookies.

2.

3. A group of 123 students went on a field trip to collect seashells. If the students collected 15 shells each, how many shells did they collect?

The students collected _____ shells.

3.

4. A girls' club is trying to get into the record books for the most hair braids. There are 372 girls. If each girl braids her hair into 40 little braids, how many braids will they have?

They will have _____ braids.

4.

5. A school bought 831 boxes of computer paper for the computer lab. Each box had 59 sheets of paper inside it. How many sheets of paper were bought in total?

The school bought _____ sheets of paper.

5.

6. A vat of orange juice contains the juice from 231 oranges. If a company has 611 vats, how many oranges would it need to fill them all?

The company would need _____ oranges.

6.

NAME _____

Lesson 1.5 Problem Solving

SHOW YOUR WORK

Solve each problem.

1. The Pancake Restaurant served 384 pancakes. If 87 customers ate an equal number of pancakes, how many did each person eat?

Each person ate _____ pancakes.

1.

2. Gary opened a bag of candy containing 126 pieces. He wants to give each of his guests the same number of pieces. If he has 42 guests, how many pieces does each person get?

Each guest gets _____ pieces.

2.

3. At the local fair, 358 people waited in line for a boat ride. The boat can hold 8 people. How many trips will the boat have to take for everyone to get a ride?

The boat will have to take _____ trips.

3.

4. Cafeteria workers were putting milk cartons into crates. They had 1,052 cartons and 36 cartons in each crate. How many full crates did they end up with?

They ended up with _____ full crates.

4.

5. A machine in a candy company creates 9,328 pieces of candy each hour. If a box of candy has 98 pieces in it, how many boxes does the machine make in one hour?

The machine makes _____ boxes each hour.

5.

6. Oliver was trying to beat his old score of 1,842 points in a video game. If he scores exactly 85 points each round, how many rounds would he need to play to beat his old score?

Oliver should play _____ rounds.

6.

NAME _____

Check What You Learned

Multiplying and Dividing Whole Numbers

Multiply.

	a	b	c	d
1.	280 × 93	814 × 37	497 × 48	6492 × 82
2.	2158 × 32	8291 × 54	212 × 561	394 × 627
3.	4176 × 283	9192 × 562	7315 × 141	5639 × 374

Divide.

4.	$6\overline{)2142}$	$4\overline{)8676}$	$49\overline{)392}$	$34\overline{)2589}$
5.	$72\overline{)745}$	$45\overline{)213}$	$61\overline{)1708}$	$94\overline{)4649}$
6.	$52\overline{)9243}$	$68\overline{)3174}$	$16\overline{)4236}$	$81\overline{)2748}$

CHAPTER 1 POSTTEST

NAME _____

Check What You Learned

SHOW YOUR WORK

Multiplying and Dividing Whole Numbers

CHAPTER 1 POSTTEST

Solve each problem.

7. The park's sprinklers can spray 1,748 gallons of water on the grass in 38 minutes. How many gallons can they spray in one minute?

They can spray _____ gallons per minute.

7.

8. The auto factory will build 1,408 new trucks in the next 32 days. How many will it build in one day?

It will build _____ trucks each day.

8.

9. Pizza Depot will open 31 new restaurants next year. Each restaurant will need 27 employees. How many employees will Pizza Depot need to hire for the new restaurants?

Pizza Depot will need to hire _____ employees.

9.

10. The parking lot has 1,326 spaces to hold cars. The lot is divided into 26 equal rows. How many cars can be parked in each row?

_____ cars can park in each row.

10.

11. If a machine can make 761 pencils in a second, how many pencils can it make in 23 seconds?

It can make _____ pencils.

11.

12. In New York City, each mail truck has 1,023 pieces of junk mail. If there are 71 mail trucks, how much junk mail do they have total?

They have _____ pieces of junk mail.

12.

NAME _____

Check What You Know

Understanding Place Value

What is the value of the underlined digit?

	a	b
1.	4,3̲32	52̲,321
	_____	_____

Write the digit that is in the given place value.

2.	30.146 – hundredth	1,325.12 – thousand
	_____	_____
3.	1.325 – tenth	731.045 – one
	_____	_____

Convert each power of ten to a standard number.

4.	10^4 _____	10^6 _____

Multiply or divide by the given power of ten.

5.	8.75 × 1,000 _____	7,643 ÷ 100 _____
6.	45.67 × 1,000 _____	34,981 ÷ 1,000 _____

Write the numbers in expanded form.

7.	592,682	78.364
	_____	_____