Number Puzzles: 1 Clue (page 1 of 2)

For each number puzzle, follow these steps.

a. Find two numbers that fit each clue.

b. Draw rectangles, and label the dimensions to show that your numbers fit the clue.

c. List other numbers that also fit the clue.

1. This number of tiles will make a rectangle that is 2 tiles wide.

Number: _____ Number: _____

Rectangle: Rectangle:

What other numbers fit this clue? _____

2. This number of tiles will make a rectangle that is 5 tiles wide.

Number: _____ Number: _____

Rectangle: Rectangle:

What other numbers fit this clue? _____

3. This number of tiles will make only one rectangle.

Number: _____ Number: _____

Rectangle: Rectangle:

What other numbers fit this clue? _____

Number Puzzles: 1 Clue (page 2 of 2)

4. This number of tiles will make a square.

Number: _____ Number: _____

Rectangle: Rectangle:

What other numbers fit this clue? _____

5. There are some numbers that can be made into only one rectangle (Problem 3). Find all of these numbers up to 50.

6. There are some numbers that can make a square (Problem 4). Find all of these numbers up to 100.

Factors and Multiples

NOTE Students find factors and multiples of 2-digit numbers.

SMH 18–19

1. List all of the factors of 42.

2. List five multiples of 42.

3. Explain the difference between a *factor* and a *multiple*.

Ongoing Review

4. Which number is **not** a factor of 36?

A. 4 **B.** 8 **C.** 9 **D.** 12

5. Which number **is** a multiple of 36?

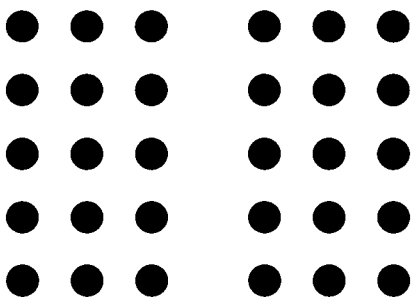
A. 200 **B.** 108 **C.** 76 **D.** 48

Seeing Number Dot Patterns

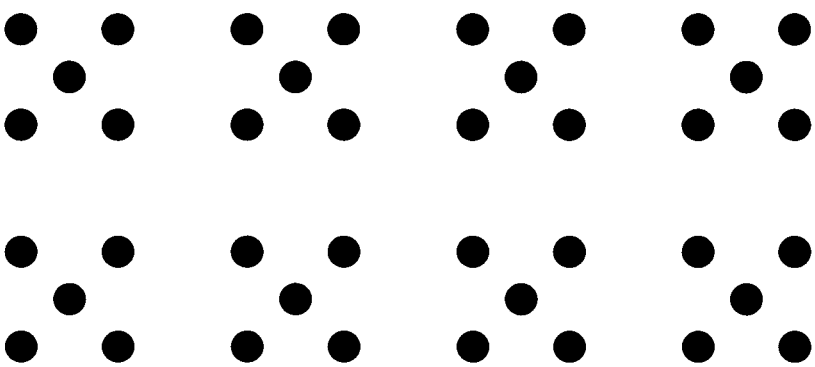
Look at each picture in different ways. Write equations to show different ways to multiply that you can see in the picture.

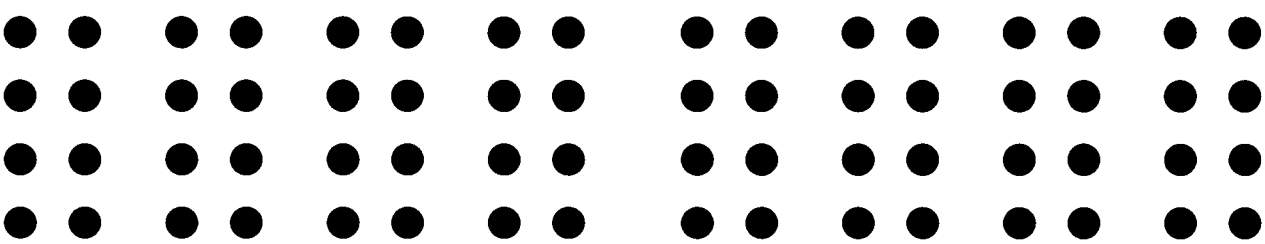
NOTE Students are beginning a new Investigation, a review of multiplication. For each picture below, they write multiplication equations representing different ways to find the number of dots.

SMH 23–24

1. 

Example $5 \times 3 \times 2 = 30$

2. 

3. 

Number Puzzles: 2 Clues (page 1 of 2)

For each number puzzle, follow these steps.

a. Find two numbers that fit both clues.

b. Draw rectangles, and label the dimensions to show that your numbers fit both clues.

c. List other numbers that also fit both clues.

1.

This number of tiles will make a rectangle that is 2 tiles wide.	and	This number of tiles will make a rectangle that is 4 tiles wide.

Numbers: _____ _____

Rectangles:

What other numbers fit this clue? _____

Number Puzzles: 2 Clues (page 2 of 2)

2.

This number of tiles will make a rectangle that is 3 tiles wide.	and	This number of tiles will make a rectangle that is 4 tiles wide.

Numbers: _____ _____

Rectangles:

What other numbers fit this clue? _____

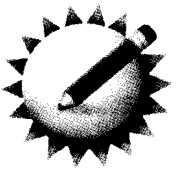
3.

This number of tiles will make a rectangle that is 20 tiles wide.	and	This number of tiles will make a rectangle that is 25 tiles wide.

Numbers: _____ _____

Rectangles:

What other numbers fit this clue? _____



Computation Practice: Adding Two Ways

Solve this problem in two different ways.
Be sure to show how you got your answer.

1,018 + 879 = _____

First way:

Second way:

NOTE Students practice strategies for solving addition problems. They work on efficiency and flexibility by solving the same problem in two different ways.

SMH 8–9

Number Puzzles Recording Sheet

Check off each puzzle you solve. Record your answer.

Investigation 1 Number Puzzles

✓	Puzzle	Answer
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8★	
	9★	
	10★	
	11★	
	12★	
	13	
	14	

Multiplication Combinations 1

Multiply each number in the first column of the table with the number at the top. For example, the answer for the first blank space in Table A is 14, which is 2 × 7. Circle any combinations you do not know immediately, and record them on *Student Activity Book* page 10.

NOTE Fifth-grade students are expected to know their multiplication combinations (facts). This page helps students determine whether they remember their combinations and identify any combinations they still need to practice.

SMH 25–29

Table A

× 7	
2	14
6	
8	
3	
10	
11	
7	
12	
4	
9	
5	

Table B

× 8	
2	
9	
4	
11	
8	
10	
6	
5	
3	
12	
7	

Table C

× 6	
10	
4	
2	
8	
3	
6	
9	
5	
12	
11	
7	

Table D

× 9	
5	
2	
12	
4	
10	
7	
3	
6	
11	
8	
9	

Multiplication Combinations
Recording Sheet

Example: 7 × 9 = 63 and 9 × 7 = 63

Clue: 7 × 10 = 70 70 − 7 = 63

NOTE Fifth-grade students are expected to know their multiplication combinations (facts). On this sheet, students write any combination they still need to practice and a clue to help them learn it. An example is shown on the left.

SMH 25–29

_____ × _____ = _____ and _____ × _____ = _____

Clue: _____

_____ × _____ = _____ and _____ × _____ = _____

Clue: _____

_____ × _____ = _____ and _____ × _____ = _____

Clue: _____

_____ × _____ = _____ and _____ × _____ = _____

Clue: _____

_____ × _____ = _____ and _____ × _____ = _____

Clue: _____

_____ × _____ = _____ and _____ × _____ = _____

Clue: _____

Number Puzzles

NOTE Students solve and create number puzzles to help learn about the composition of numbers.

SMH 21–22

1. Solve the following number puzzle.

Clue 1 This number is a factor of 48.	**Clue 2** This number is even.
Clue 3 This number is a multiple of 6.	**Clue 4** The sum of the digits of this number equals 3.

What number is it? _____

2. Make up your own number puzzle.

Clue 1	**Clue 2**
Clue 3	**Clue 4**

The number is _____.

Ongoing Review

3. Which number fits the following clues?

Clue 1 This number is even.
Clue 2 This number is a factor of 54.

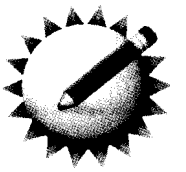
A. 3 **B.** 6 **C.** 9 **D.** 12

Multiplying to Make 18 and 180

1. Find all the multiplication combinations you can for these two numbers, using whole numbers. Start by multiplying two factors. Then find ways to multiply with more than two factors.

18	180

2. How did finding the ways to multiply with two numbers help you find ways to multiply with more than two numbers?



Factors of 2-Digit Numbers

NOTE Students find factors of 2-digit numbers.

SMH 18

1. Find all of the factors of 36.

2. Find all of the factors of 72.

3. How are the factors of 36 related to the factors of 72?

Ongoing Review

4. Which number is **not** a factor of 124?

A. 31 **B.** 12 **C.** 4 **D.** 2

Multiplication Combinations 2

Multiply each number in the first column of the table with the number at the top. For example, find the product of 3×7 for the first blank space in Table A.

In Tables C and D, write a number at the top for a group of combinations you need to practice.

Circle any combinations you do not know immediately, and record them on *Student Activity Book* page 10 or on M30 that your teacher will give you.

NOTE Fifth-grade students are expected to know their multiplication combinations (facts). This page helps students determine whether they remember their combinations and identify any combinations they still need to practice.

SMH 25–29

Table A

× 7	
3	
6	
9	
2	
4	
10	
8	
12	
5	
7	
11	

Table B

× 8	
2	
7	
3	
5	
6	
10	
8	
11	
12	
4	
9	

Table C

× ____	
10	
4	
2	
8	
3	
6	
9	
5	
12	
11	
7	

Table D

× ____	
5	
2	
12	
4	
10	
7	
3	
6	
11	
8	
9	

All of the Ways to Multiply

Find all of the ways to multiply to make each product, using whole numbers. First, find the combinations with two factors, and then find ways to multiply with more than two factors.

1.

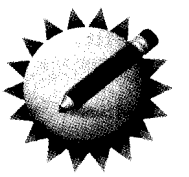
12	120

2.

21	210

Name Date

Daily Practice



Factors of 3-Digit Numbers

NOTE Students find factors of 3-digit numbers.

SMH 18

1. Find all of the factors of 100.

2. Find all of the factors of 200.

3. Did you use the factors of 100 to find the factors of 200? If so, how?

Ongoing Review

4. Which number is **not** a factor of 150?

A. 3 **B.** 15 **C.** 75 **D.** 125

Multiplication Combinations 3

Multiply each number in the first column of the table with the number at the top. For example, find the product of 9 × 6 for the first blank space in Table A.

In Tables C and D, write a number at the top for a group of combinations you need to practice.

Circle any combinations you do not know immediately, and record them on *Student Activity Book* page 10 or on M30 which your teacher will give you.

NOTE Fifth-grade students are expected to know their multiplication combinations (facts). This page helps students determine whether they remember their combinations and identify any combinations they still need to practice.

SMH 25–29

Table A

× 6	
9	
4	
7	
5	
8	
3	
12	
2	
11	
6	
10	

Table B

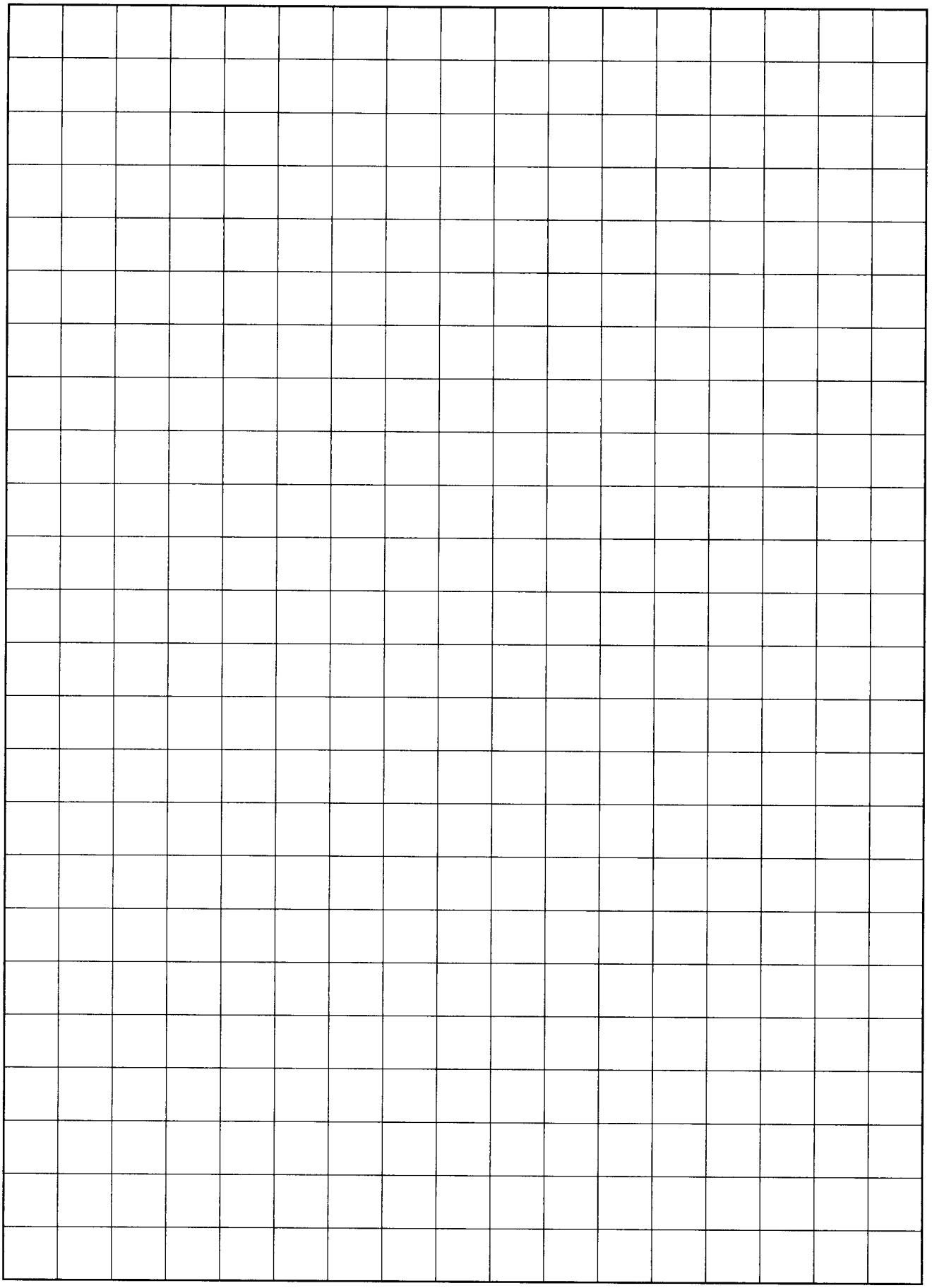
× 8	
4	
5	
3	
2	
6	
10	
7	
12	
8	
4	
9	

Table C

× ____	
10	
5	
12	
7	
4	
2	
8	
6	
3	
12	
9	

Table D

× ____	
12	
9	
8	
7	
2	
11	
3	
4	
10	
5	
6	



Multiplication Combinations for 120, 180, and 210 (page 1 of 2)

Think about these questions and give examples from your work on pages 12 and 15 to explain your answers.

1. How did the multiplication combinations you wrote for 12, 18, and 21 help you find some combinations for 120, 180, and 210? Give examples.

2. How did you figure out ways to multiply with three or more factors?

3. How did you know that you found all the possible multiplication combinations for each number?

Multiplication Combinations for 120, 180, and 210 (page 2 of 2)

4. Write the longest multiplication combination you found for each of these numbers.

120

180

210

5. Look at the numbers above. Is it possible to find a different way to multiply with the same number of factors as what you wrote in Problem 4? (This does not include multiplying the same factors in a different order.)

_____

How do you know?

Factors and Multiples of 3-Digit Numbers

NOTE Students find factors and multiples of 3-digit numbers.

SMH 18–19

1. Find all of the factors of 150.

2. List five multiples of 150.

Ongoing Review

3. Which multiplication combination equals 300?

A. $2 \times 30 \times 6$

B. $10 \times 6 \times 20$

C. $15 \times 2 \times 10$

D. $2 \times 3 \times 15$

Multiplication Combinations 4

In the top blank in each table, write a number for a group of combinations you need to practice. Then multiply each number in the first column of the table by the number at the top.

Circle any combinations you do not know immediately, and record them on *Student Activity Book* page 10 or on M30 which your teacher will give you.

NOTE Fifth-grade students are expected to know their multiplication combinations (facts). This page helps students determine whether they remember their combinations and identify any combinations they still need to practice.

SMH **25–29**

Table A

× ____	
2	
4	
6	
8	
10	
12	
3	
5	
7	
9	
11	

Table B

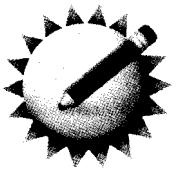
× ____	
11	
2	
10	
5	
9	
6	
7	
8	
3	
12	
4	

Table C

× ____	
9	
11	
8	
6	
10	
4	
12	
7	
5	
3	
2	

Table D

× ____	
5	
9	
2	
12	
3	
8	
6	
4	
7	
11	
10	



Multiplying to Make 60 and 90

Find as many ways as you can to multiply whole numbers to make each product.

NOTE Students find multiplication combinations with two factors and with more than two factors for 60 and for 90.

SMH 23–24

1. Multiplying to make 60

Ways to multiply with two factors:	Ways to multiply with more than two factors:

2. Multiplying to make 90

Ways to multiply with two factors:	Ways to multiply with more than two factors:

Ongoing Review

3. Which multiplication combination equals 150?

A. $10 \times 5 \times 10$

B. $75 \times 2 \times 10$

C. $25 \times 2 \times 3$

D. $10 \times 5 \times 5$

Multiplication Combinations 5

In the top blank in each table, write a number for a group of combinations you need to practice. Then multiply each number in the first column of the table by the number at the top.

Circle any combinations you do not know immediately, and record them on *Student Activity Book* page 10 or on M30 which your teacher will give you.

NOTE Fifth-grade students are expected to know their multiplication combinations (facts). This homework helps students determine whether they remember their combinations and identify any combinations they still need to practice.

SMH 25–29

Table A

× ____	
4	
8	
6	
2	
9	
12	
3	
5	
7	
11	
10	

Table B

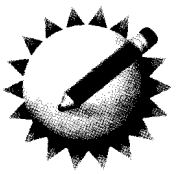
× ____	
6	
10	
2	
11	
4	
12	
9	
8	
5	
7	
3	

Table C

× ____	
5	
7	
8	
3	
9	
4	
11	
6	
12	
10	
2	

Table D

× ____	
3	
5	
2	
6	
9	
10	
4	
11	
12	
8	
7	



Multiplying 2-Digit Numbers

NOTE Students multiply two 2-digit numbers.

SMH 30–32

Solve these problems and show your work.

1. 26×12

2. 18×34

Ongoing Review

3. $12 \times 18 =$ _____

A. more than 400

B. about 300

C. about 200

D. less than 100

Factors of 50 and 72

Find as many ways as you can to multiply using whole numbers to make each product.

NOTE Students practice finding multiplication combinations with two factors and with more than two factors for 50 and 72.

SMH 23–24

1. Multiplying to Make 50

Ways to multiply with two factors:	Ways to multiply with more than two factors:

2. Multiplying to Make 72

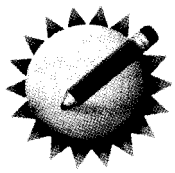
Ways to multiply with two factors:	Ways to multiply with more than two factors:

Solving Multiplication Problems

Choose three of these problems to solve. Show your work. Use clear and concise notation.

After you have solved the problems, pick at least one of your solutions and use a representation to show how you solved it.

27×19 42×32 76×8 82×56 65×14



Multiplying Two Ways

NOTE Students multiply a 2-digit number in two different ways.

SMH **30–32**

1. Solve this problem in two different ways. Show each solution clearly.

$26 \times 19 =$ _____

First way:

Second way:

Ongoing Review

2. $6 \times 3 \times 10 \times 2 =$ _____

A. 120 **B.** 300 **C.** 360 **D.** 630

Multiplication Practice

Solve the problems below. Show your solution clearly.

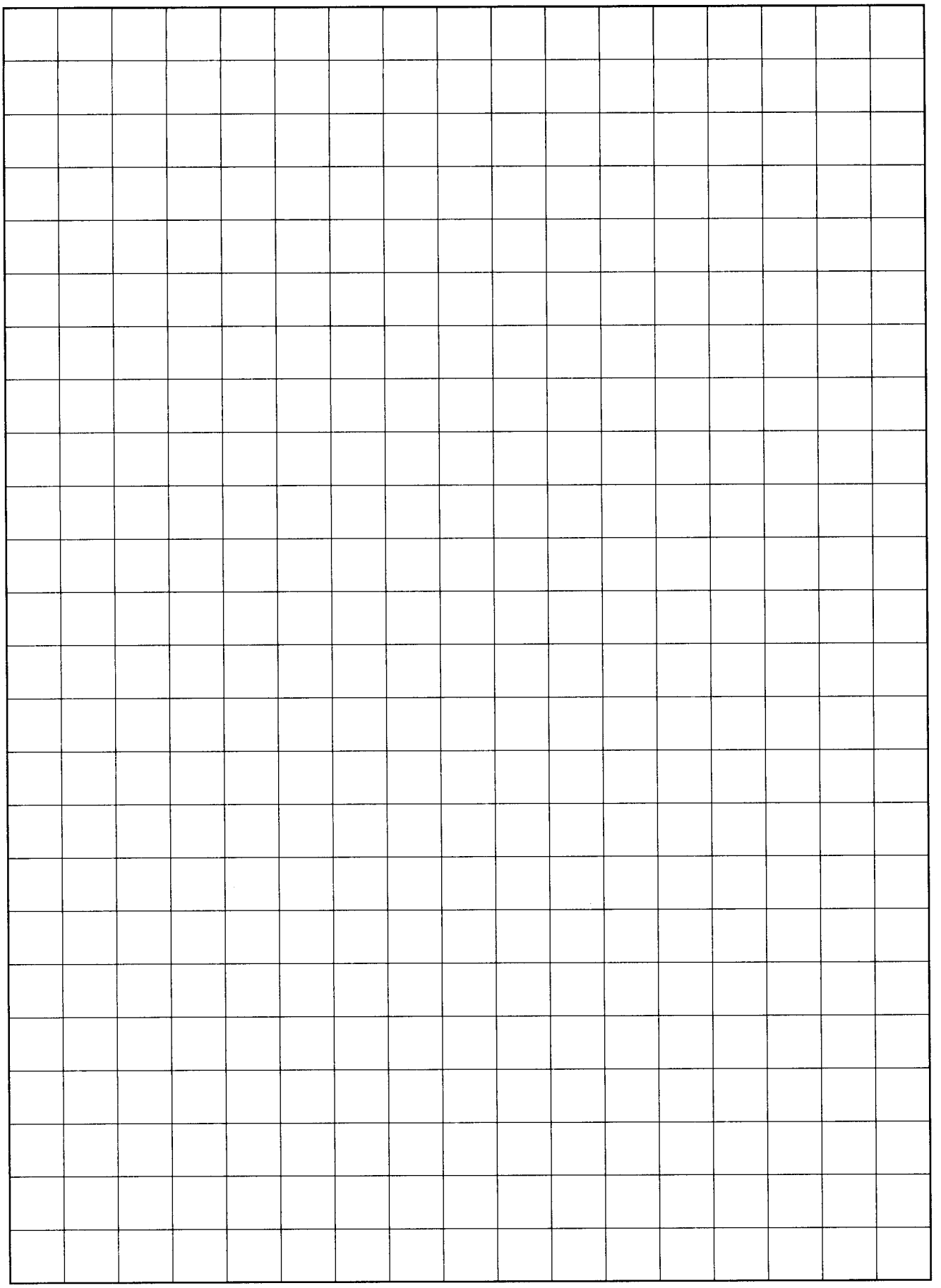
1. 24×15

NOTE In class, students are solving multiplication problems. They are using story contexts and representations to help them solve the problems and explain their solutions. As they solve the problems below, ask them what part of the problem they have solved and what part they still need to solve.

SMH 30–32

2.
$$\begin{array}{r} 49 \\ \times\ 9 \\ \hline \end{array}$$

3. 36×25



Multiplication Compare Recording Sheet

After you have played a few rounds of *Multiplication Compare,* complete this sheet.

Place a $<$, $>$, or $=$ in the box between the problems.

1. Your problem: Partner's problem:

_____ × _____ ☐ _____ × _____

How did you decide whose product is greater? Explain your reasoning.

2. Your problem: Partner's problem:

_____ × _____ ☐ _____ × _____

How did you decide whose product is greater? Explain your reasoning.

3. Your problem: Partner's problem:

_____ × _____ ☐ _____ × _____

How did you decide whose product is greater? Explain your reasoning.

More Multiplying Two Ways

NOTE Students multiply 2-digit numbers in two different ways.

SMH 30–32

1. Solve this problem in two different ways. Show each solution clearly.

$36 \times 26 =$ _____

First way:

Second way:

Circle the problem that has the greater product. Circle both if they are equal.

2. 6×40 5×50

3. 40×20 200×4

4. 300×20 100×40

Which Is Greater?

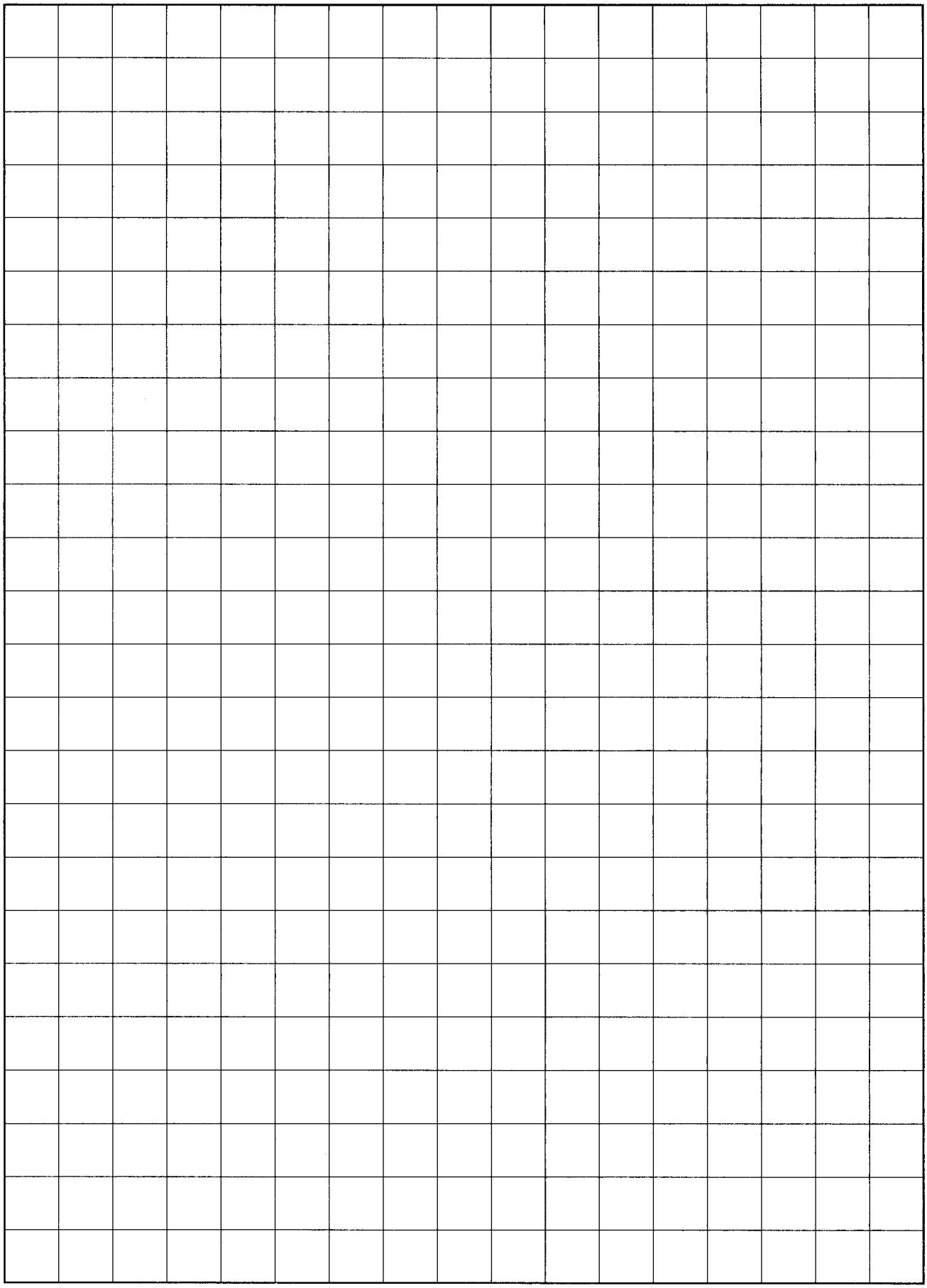
Circle the problem that has the greater product, and write < or > between the problems. (Remember that the wide-open part of the symbol is toward the greater number and the point is toward the smaller one.) Put = between the problems if the products are equal.

In the space to the right of the problems, write how you decided which answer is greater.

NOTE Students have been solving multiplication problems that involve multiples of 10, such as 20, 30, 40, 100, 200, and so on.

SMH **30–32**

1. 20×50 ☐ 30×40	
2. 7×80 ☐ 70×8	
3. 200×40 ☐ 100×80	
4. 50×60 ☐ 40×70	
5. 300×7 ☐ 30×70	



Multiplication Cluster Problems

1. Solve these problems.

$10 \times 12 =$ _____ $20 \times 12 =$ _____

$20 \times 10 =$ _____ $8 \times 10 =$ _____

$28 \times 2 =$ _____

Now solve $28 \times 12 =$ _____.

How did you solve it?

2. Solve these problems.

$35 \times 10 =$ _____ $10 \times 25 =$ _____

$35 \times 20 =$ _____ $20 \times 25 =$ _____

$30 \times 25 =$ _____

Now solve $35 \times 25 =$ _____.

How did you solve it?

3. Solve these problems.

$10 \times 21 =$ _____ $20 \times 20 =$ _____

$20 \times 21 =$ _____ $7 \times 20 =$ _____

$5 \times 21 =$ _____

Now solve $27 \times 21 =$ _____.

How did you solve it?

4. Solve these problems.

$100 \times 7 =$ _____ $15 \times 7 =$ _____

$40 \times 7 =$ _____ $150 \times 7 =$ _____

Now solve $146 \times 7 =$ _____.

How did you solve it?

Problems Involving Teams

Solve the problems below. Your work should be clear enough so that anyone looking at it will know how you solved the problem.

1. There are 37 teams and 28 students on each team. How many students are there?

2. There are 68 teams at the soccer tournament. Each team has 16 players. How many soccer players are at the tournament?

3. There are 49 teams in the youth football league. Each team has 28 players. How many football players are there?

4. There are 57 teams entered in the relay race for Field Day. Each team has 32 people. How many people are entered in the relay race?

5. There are 44 teams and 35 people on each team. How many people are on teams?

More Multiplying 2-Digit Numbers

NOTE Students multiply 2-digit numbers.

SMH 30–32

Solve these problems. Show each solution clearly.

1. 48 × 34

2. 28 × 21

Ongoing Review

3. Is the product of 32 × 28

A. more than 1,000?

B. between 500 and 1,000?

C. between 100 and 500?

D. less than 100?

Many Ways to Multiply

Find all of the ways to multiply to make each product. First, find the ways with two factors, and then find ways to multiply with more than two factors.

NOTE Students find ways to multiply to make each product.

SMH 23–24

1. 144

2. 300

More Multiplication Cluster Problems

1. Solve these problems.

$10 \times 26 =$ _____ $30 \times 2 =$ _____

$20 \times 26 =$ _____ $30 \times 6 =$ _____

$30 \times 26 =$ _____

$5 \times 26 =$ _____

Now solve $36 \times 26 =$ _____.

How did you solve it?

2. Solve these problems.

$49 \times 10 =$ _____ $40 \times 7 =$ _____

$49 \times 20 =$ _____ $40 \times 60 =$ _____

$9 \times 60 =$ _____

Now solve $49 \times 67 =$ _____.

How did you solve it?

3. Solve these problems.

$10 \times 15 =$ _____ $125 \times 10 =$ _____

$20 \times 15 =$ _____ $125 \times 5 =$ _____

$100 \times 15 =$ _____

Now solve $125 \times 15 =$ _____.

How did you solve it?

4. Solve these problems.

$60 \times 80 =$ _____ $60 \times 90 =$ _____

$2 \times 9 =$ _____ $2 \times 90 =$ _____

$2 \times 80 =$ _____

Now solve $62 \times 89 =$ _____.

How did you solve it?

Computation Practice: Subtracting Two Ways

NOTE Students practice strategies for solving subtraction problems. They work on efficiency and flexibility by solving the same problem in two different ways.

SMH **10–13**

1. Solve this problem in two different ways. Be sure to show how you got your answer.

$30.50 − $17.79 = _____

First way:

Second way:

Starter Problems (page 1 of 2)

1. Solve these problems.

a. $30 \times 20 =$ _____ **b.** $40 \times 20 =$ _____ **c.** $39 \times 10 =$ _____

Now choose one of the problems above as the first step to solve this problem. Show your solution.

$39 \times 26 =$ _____

2. Solve these problems.

a. $33 \times 100 =$ _____ **b.** $30 \times 50 =$ _____ **c.** $10 \times 55 =$ _____

Now choose one of the problems above as the first step to solve this problem. Show your solution.

$33 \times 55 =$ _____

Starter Problems (page 2 of 2)

3. Solve these problems.

a. $47 \times 10 =$ _____ **b.** $40 \times 30 =$ _____ **c.** $10 \times 36 =$ _____

Now choose one of the problems above as the first step to solve this problem. Show your solution.

$47 \times 36 =$ _____

4. Solve these problems.

a. $6 \times 15 =$ _____ **b.** $100 \times 15 =$ _____ **c.** $106 \times 10 =$ _____

Now choose one of the problems above as the first step to solve this problem. Show your solution.

$106 \times 15 =$ _____

Computation Practice: Addition and Subtraction

NOTE Students practice addition and subtraction problems.

SMH 8–9, 10–13

Solve the problems below. Show your solutions, using clear and concise notation.

1. 536 +247	**2.** 724 −243
3. 551 + 463 = _____	**4.** 620 −125
5. _____ + 840 = 1,600	**6.** _____ − _____ = 350
7. _____ + _____ = 1,250	**8.** 800 − _____ = 275

More Starter Problems (page 1 of 2)

Finish solving the problems with the first step that is given. Then solve the same problem in your own way. Record both of your solutions, using clear and concise notation.

1. $68 \times 75 =$ _____

a. Start with 60×70.

b. Solve 68×75 another way.

2. $98 \times 36 =$ _____

a. Start with 100×36.

b. Solve 98×36 another way.

More Starter Problems (page 2 of 2)

3. $16 \times 128 =$ _____

a. Start with 4×128.

b. Solve 16×128 another way.

4. $207 \times 46 =$ _____

a. Start with 207×10.

b. Solve 207×46 another way.

"How Far?" Problems

Solve the following problems, and explain how you found the distance between the numbers.

NOTE Students use addition and subtraction to solve problems.

SMH 8–9, 10–13

1. How far is it from 752 to 1,000?

2. How far is it from 619 to 2,000?

3. How far is it from 1,345 to 3,000?

4. How far is it from 4,658 to 5,000?

Dividing by 2-Digit Numbers

NOTE Students solve a division problem, show their solution, and write a story problem.

SMH 38–39

1. Solve the following problem. Show your solution clearly.

162 ÷ 12

2. Write a story problem that represents 162 ÷ 12.

3. What is the answer to your story problem?

Ongoing Review

4. Is the product of 19 × 45

A. about 500?

B. about 1,000?

C. about 1,500?

D. about 2,000?

Solve in Two Ways

Solve this problem in two different ways. Show your work clearly.

$46 \times 37 =$ _____

NOTE Students are working on solving multiplication problems in several ways. Solving a problem in two different ways helps develop flexibility and allows students to double-check their work.

SMH **30–32**

First way:

Second way:

Problems about Multiples of 21 (page 1 of 2)

Use the multiple tower for 21 or your list of multiples of 21 to help you with these problems. Be sure to use your answers to the earlier problems to help you with the later problems.

1. $10 \times 21 =$ _____

2. $105 \div 21 =$ _____

3. $315 \div$ _____ $= 21$

4. _____ $\times 21 = 420$

5. $5 \times 21 =$ _____

6. $210 \div 21 =$ _____

7. $15 \times 21 =$ _____

Problems about Multiples of 21 (page 2 of 2)

8. _____ × 21 = 630

9. 945 ÷ _____ = 21

10. 441 ÷ 21 = _____

11. Write and solve two division problems using multiples of 21.

Story Problems: Reading a Long Book

NOTE Students practice solving addition and subtraction problems in a story problem context.

SMH 8–9, 10–13

1. Noemi borrowed a new book from the library. At 1,000 pages, it is the longest book she has ever tried to read! The first day, she read 115 pages. How many more pages does she have to read to reach the end?

2. During the next week, Noemi read 388 pages. How many pages has she read altogether?

3. At the end of 2 weeks, Noemi had read 816 pages. How many pages does she have left to finish the book?

Solving 315 ÷ 21

1. Write a story problem for 315 ÷ 21.

NOTE Students have been solving division problems. Students should think about what multiplication combinations they know that can help them solve this problem.

SMH 38–39

2. Solve 315 ÷ 21.

Division Problems

Solve the following problems. Make sure anyone looking at your work can tell how you solved the problem.

1. Write a word problem for $21\overline{)252}$ and solve it.

2. There are 415 biographies in the school library. If each shelf holds 27 books, how many shelves are completely filled? How many books are left?

3. Write a word problem for the equation $525 \div 21 =$ _____. Then solve it.

4. There are 748 students eating lunch in the cafeteria at school. The same number of students is sitting at each of 22 tables. How many students are sitting at each table?

Story Problems: School Supplies

NOTE Students practice solving addition and subtraction problems in a story problem context.

SMH 8–9, 10–13

1. Mr. Mancillas had $200 to spend on art supplies. He spent $103.80 on drawing paper and $86.35 on paint brushes.

a. How much did he spend on art supplies?

b. How much money did he have left after he bought the art supplies?

2. Mrs. Kim had $300 to spend on science materials. She spent $77.49 on thermometers and $219.99 on a microscope.

a. How much did she spend on science materials?

b. How much money did she have left after she bought the science materials?

Numbers Off the Tower

Use the multiple tower to solve these problems. Make sure that your work is clear enough that someone looking at it will know how you solved the problem.

1. 1,344 ÷ 21 = _____

2. _____ × 21 = 1,512

3. $21\overline{)1{,}275}$

4. 2,121 ÷ _____ = 21

5. Write two of your own problems, using multiples not on the tower. Solve the problems.

Story Problems: Stamp Collection

NOTE Students practice solving addition and subtraction problems in a story problem context.

SMH 8–9, 10–13

1. Helena has a collection of stamps. She has 734 South American stamps and 555 African stamps.

a. How many stamps does Helena have?

b. How many more stamps does she need to have 1,500 altogether?

2. Kaetwan also has a stamp collection. He has 839 stamps from Africa and 472 stamps from North America.

a. How many stamps does Kaetwan have?

b. How many more stamps does he need to have 1,500 altogether?

3. How many more stamps does Kaetwan have in his collection than Helena has in her collection?

Multiple Tower for 15

(page 1 of 2)

NOTE Students have been using a list of multiples (similar to the strip on the right side of this page) to solve division problems.

SMH 20

1. Complete the multiple tower at the right, and stop when you get to 480.

2. How many 15s are in 450? Solve without counting and show how you did it.

3. The 10th, 20th, and 30th multiples of 15 are 150, 300, and 450. What are the 40th and 50th multiples of 15? How do you know?

90
75
60
45
30
15

Multiple Tower for 15 (page 2 of 2)

4. Jean has 270 flowers and 15 vases. If she puts an equal number of flowers in each vase, how many flowers will go in each one?

5. Solve $15\overline{)645}$. Show your solution.

Division Cluster Problems (page 1 of 2)

1. Solve these problems.

30 ÷ 15 = _____

60 ÷ 15 = _____

150 ÷ 15 = _____

Now solve 190 ÷ 15 = _____.

How did you solve it?

2. Solve these problems.

10 × 18 = _____

5 × 18 = _____

Now solve $18\overline{)252}$.

How did you solve it?

3. Solve these problems.

75 × 2 = _____

75 × 4 = _____

75 × 6 = _____

Now solve 525 ÷ 75 = _____.

How did you solve it?

4. Solve these problems.

160 ÷ 16 = _____

80 ÷ 16 = _____

320 ÷ 16 = _____

Now solve 450 ÷ 16 = _____.

How did you solve it?

Division Cluster Problems (page 2 of 2)

5. Solve these problems.

$10 \times 21 =$ _____

$20 \times 21 =$ _____

$30 \times 21 =$ _____

Now solve $21\overline{)700}$.

How did you solve it?

6. Solve these problems.

$270 \div 27 =$ _____

$540 \div 27 =$ _____

Now solve $594 \div 27 =$ _____.

How did you solve it?

7. Solve these problems.

$10 \times 25 =$ _____

$20 \times 25 =$ _____

$30 \times 25 =$ _____

$40 \times 25 =$ _____

Now solve $982 \div 25 =$ _____.

How did you solve it?

8. Solve these problems.

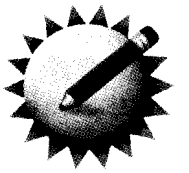
$100 \div 25 =$ _____

$1{,}000 \div 25 =$ _____

$2{,}000 \div 25 =$ _____

Now solve $2{,}300 \div 25 =$ _____.

How did you solve it?



Division

Solve the following problems. Show your solutions clearly.

NOTE Students solve division problems and show their solutions.

SMH 38–39

1. 288 ÷ 16 = _____

2. 600 ÷ 15 = _____

Ongoing Review

3. 900 ÷ 20 = _____

A. 450 **B.** 45 **C.** 40 **D.** 20

Division Practice

NOTE Students practice solving division problems.

SMH 38–39

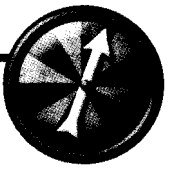
Solve these division problems. Your notation should be clear enough so that anyone looking at your work will know how you solved the problem.

1. There are 432 magazines in the library. Each shelf holds 12 magazines. How many shelves hold magazines?

2. There are 8 schools in town, and 408 books were donated to the school libraries. If the books are distributed evenly, how many books will each library receive?

3. 850 ÷ 25 = _____

4. 935 ÷ 21 = _____



Division Compare Recording Sheet

After you have played a few rounds of *Division Compare,* complete this sheet.
Place a $<$, $>$, or $=$ in the box between the problems.

1. Your problem: Partner's problem:

_____ ÷ _____ ☐ _____ ÷ _____

How did you decide whose problem has the greater quotient? Explain your reasoning.

2. Your problem: Partner's problem:

_____ ÷ _____ ☐ _____ ÷ _____

How did you decide whose problem has the greater quotient? Explain your reasoning.

3. Your problem: Partner's problem:

_____ ÷ _____ ☐ _____ ÷ _____

How did you decide whose problem has the greater quotient? Explain your reasoning.

Problems about *Division Compare*

Two people were playing *Division Compare*. These are the problems they had to solve as a result of the cards they picked. Place a $<$, $>$, or $=$ sign between the problems, and explain how you decided which problem has the greater quotient.

1. Player A: $800 \div 400$ ☐ Player B: $900 \div 10$

Explanation:

2. Player A: $200 \div 50$ ☐ Player B: $90 \div 50$

Explanation:

3. Player A: $600 \div 70$ ☐ Player B: $400 \div 20$

Explanation:

4. Player A: $600 \div 40$ ☐ Player B: $70 \div 10$

Explanation:

Solving Division Problems (page 1 of 2)

Solve each of the following problems. Be sure to answer the question posed by the story context.

1. There are 406 students in Grades 3, 4, and 5. There are 14 classrooms, and each classroom has the same number of students. How many students are in each classroom?

2. Melissa has 880 baseball cards that she wants to store in envelopes. If each envelope holds 35 cards, how many envelopes does she need?

3. Joel collects stamps and has 1,200 international stamps that he wants to put in an album. Each page holds 45 stamps. How many pages will he use?

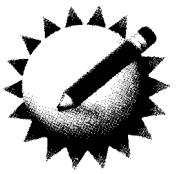
Solving Division Problems (page 2 of 2)

Write a word problem for each division problem. Your word problem should end in a question. Solve the problem and answer the question.

4. 807 ÷ 7 = _____

5. 945 ÷ 21 = _____

6. 620 ÷ 42 = _____



Story Problems: Selling Fruit

NOTE Students practice solving addition and subtraction problems in a story problem context.

SMH 8–9, 10–13

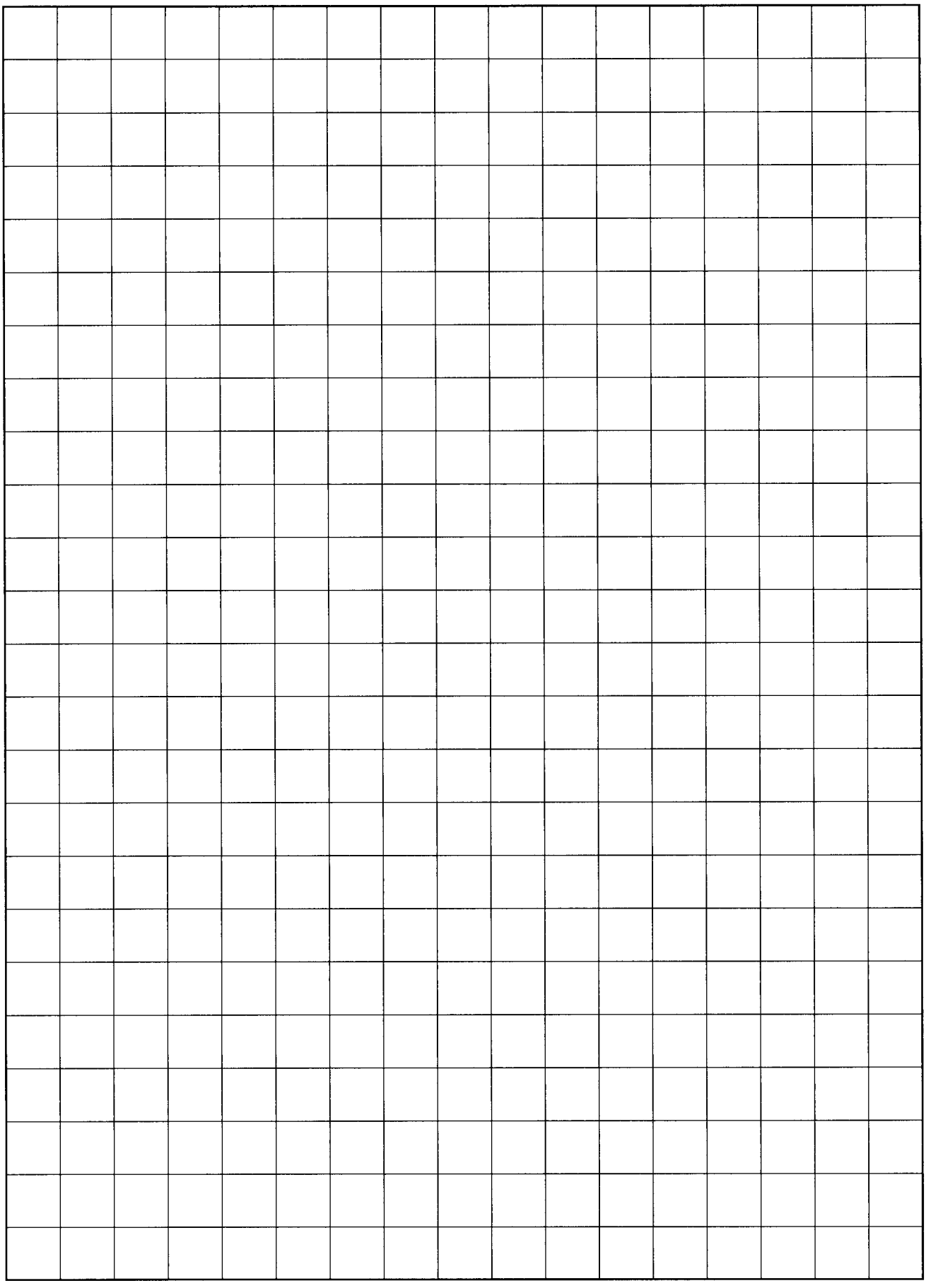
1. On Monday, a grocery store received a shipment of 1,000 apples. The apples were quite tasty, and the store sold 346 of them that day. How many apples were left to sell?

2. On Wednesday, the store received a shipment of 1,200 oranges. The store sold 263 oranges that day. How many oranges were left to sell?

3. On Saturday, the store received a shipment of 2,000 mangos. The store sold 415 mangos on Saturday and 680 mangos on Sunday.

a. How many mangos did the store sell on the weekend (Saturday and Sunday)?

b. How many mangos were left to sell?



Practicing Multiplication and Division (page 1 of 2)

WRITING

Solve the following problems. Make sure that anyone looking at your work can tell how you solved the problem.

NOTE Students continue to practice solving multiplication and division problems.

SMH 14

1. There are 64 teams at the basketball tournament. Each team has 12 players. How many players are at the basketball tournament?

2. Write a word problem for $35\overline{)490}$ and solve it.

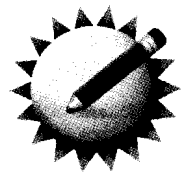
3. Michael has 275 baseball cards that he wants to store in envelopes. If he puts 25 cards in each envelope, how many envelopes does he need?

Practicing Multiplication and Division (page 2 of 2)

4. There are 118 rows in the auditorium. If 29 people sit in each row, how many people are in the auditorium?

5. Mrs. Garcia teaches fifth grade. She has 720 pattern blocks and 24 plastic containers. If she wants to divide the pattern blocks evenly, how many will she put in each container?

6. Write a word problem for 13×42 and show your solution.



Coin Jars

Find two different solutions to each of these problems.

NOTE Students solve problems about combinations of coins.

SMH 63

1. Duante has a coin jar full of pennies, dimes, nickels, and quarters. Most of the coins in his jar are pennies. He knows that there is $7.00 in his coin jar. What combination of coins could be in Duante's coin jar that would equal $7.00?

First Solution	Second Solution

2. Ursula also has a coin jar. There are only two kinds of coins in her coin jar. She knows that there is $3.75 in her jar. What combination of coins could be in Ursula's coin jar that would equal $3.75?

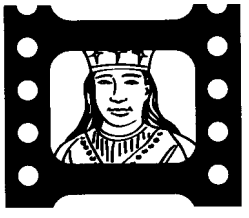
First Solution	Second Solution

Multiple Towers and Filmmaking

NOTE Students solve real-world problems involving the math content of this unit.

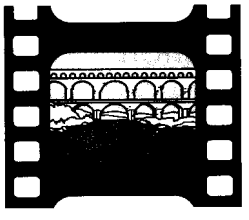
SMH 20

Use multiple towers to help you find the answers.

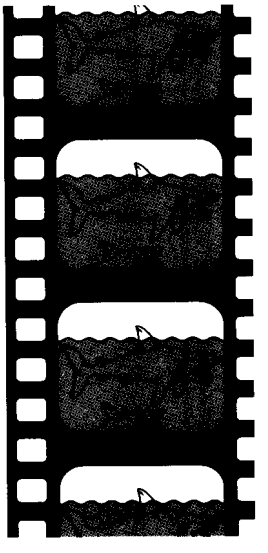
1. 

This is a single frame of movie film. In the early years of motion pictures, filmmakers used 16 frames per second to film a silent movie.

How many frames of film are there in 12 seconds of a silent movie? Explain how you found the answer.

2. 

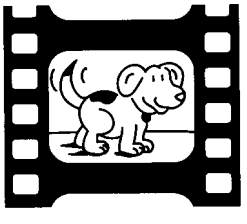
In today's motion pictures, filmmakers use 24 frames per second.



How many frames of film are there in 12 seconds of a modern movie? _____ 25 seconds? _____

1 minute? _____

At 24 frames per second, how many seconds would it take to show 504 frames? _____

3. 

Many cartoons show 24 separate pictures per second.

How many pictures does a cartoonist need to draw for a 30-second cartoon? _____

4. Suppose that a silent movie is run on modern equipment at 24 frames per second. Would the action in the movie appear to be in slow motion or speeded up? Why do you think so?