

Lesson 42

EXERCISE 1: NUMBER FAMILIES

MULTIPLICATION/DIVISION—DIVISION FACTS

- a. Open your workbook to Lesson 42 and find part 1. ✓

(Teacher reference:)

a. $3 \overline{) \quad} \xrightarrow{8}$ d. $\quad \overline{) \quad} \xrightarrow{4} 12$ g. $9 \overline{) \quad} \xrightarrow{4}$ j. $3 \overline{) \quad} \xrightarrow{18}$
 b. $\quad \overline{) \quad} \xrightarrow{6} 36$ e. $9 \overline{) \quad} \xrightarrow{81}$ h. $\quad \overline{) \quad} \xrightarrow{8} 24$ k. $2 \overline{) \quad} \xrightarrow{9}$
 c. $9 \overline{) \quad} \xrightarrow{6}$ f. $3 \overline{) \quad} \xrightarrow{7}$ i. $\quad \overline{) \quad} \xrightarrow{8} 72$ l. $\quad \overline{) \quad} \xrightarrow{7} 63$

One of the numbers in each family is missing. You'll say the problem and the answer for the missing number in each family. Then you'll complete the families.

- Family A. Say the problem for the missing number. (Signal.) 3×8 .
 - What's 3×8 ? (Signal.) 24.
- b. (Repeat the following tasks for families B through L:)

Say the problem for family ____.	What's ____?		
B	$36 \div 6$	$36 \div 6$	6
C	9×6	9×6	54
D	$12 \div 4$	$12 \div 4$	3
E	$81 \div 9$	$81 \div 9$	9
F	3×7	3×7	21
G	9×4	9×4	36
H	$24 \div 8$	$24 \div 8$	3

(If students were 100% on families A through H, skip to step c.)

I	$72 \div 8$	$72 \div 8$	9
J	$18 \div 3$	$18 \div 3$	6
K	2×9	2×9	18
L	$63 \div 7$	$63 \div 7$	9

(Repeat families that were not firm.)

- c. Write the missing number in each family. Put your pencil down when you've completed the families in part 1.
 (Observe students and give feedback.)

- d. Check your work. You'll tell me the missing number you wrote for each family.

- Family A. (Signal.) 24.
- (Repeat for:) B, 6; C, 54; D, 3; E, 9; F, 21; G, 36; H, 3; I, 9; J, 6; K, 18; L, 9.

- e. Find part 2 in your workbook. ✓

(Teacher reference:)

a. $8 \times 3 =$ g. $5 \times 5 =$ m. $4 \overline{) 16}$ s. $7 \overline{) 49}$ y. $5 \overline{) 10}$
 b. $9 \times 4 =$ h. $3 \overline{) 27}$ n. $9 \times 6 =$ t. $2 \overline{) 14}$ z. $7 \times 9 =$
 c. $9 \overline{) 18}$ i. $8 \overline{) 64}$ o. $6 \overline{) 36}$ u. $9 \overline{) 90}$ A. $3 \overline{) 27}$
 d. $3 \overline{) 21}$ j. $8 \times 9 =$ p. $8 \overline{) 72}$ v. $9 \times 9 =$ B. $9 \times 5 =$
 e. $4 \times 4 =$ k. $3 \times 7 =$ q. $3 \times 6 =$ w. $5 \times 8 =$ c. $9 \overline{) 81}$
 f. $3 \overline{) 9}$ l. $10 \overline{) 100}$ r. $10 \overline{) 80}$ x. $9 \overline{) 54}$ D. $5 \overline{) 45}$

These multiplication and division problems are from multiplication families you know. You'll read some of the problems and tell me if the answer is the big number or a small number. Then you'll work all of the problems.

- f. Read problem A. (Signal.) 8×3 .
- Is the answer the big number or a small number? (Signal.) *The big number.*
 - What's 8×3 ? (Signal.) 24.
- g. (Repeat the following tasks with problems B through H:)

Read problem ____.	Is the answer the big number or a small number?		What's ____?	
B	9×4	<i>The big number.</i>	9×4	36
C	$18 \div 9$	<i>A small number.</i>	$18 \div 9$	2
D	$21 \div 3$	<i>A small number.</i>	$21 \div 3$	7
E	4×4	<i>The big number.</i>	4×4	16
F	$9 \div 3$	<i>A small number.</i>	$9 \div 3$	3
G	5×5	<i>The big number.</i>	5×5	25
H	$27 \div 3$	<i>A small number.</i>	$27 \div 3$	9

(Repeat problems that were not firm.)

- h. Work all the problems in part 2. You have two minutes.
- Get ready. Go.
 - (Observe students and give feedback.)
 - (After 2 minutes say:) Stop.

- i. Check your work. You'll read the fact for each problem.
- **Problem A.** (Signal.) $8 \times 3 = 24$.
 - (Repeat for:) B, $9 \times 4 = 36$; C, $18 \div 9 = 2$; D, $21 \div 3 = 7$; E, $4 \times 4 = 16$; F, $9 \div 3 = 3$; G, $5 \times 5 = 25$; H, $27 \div 3 = 9$; I, $64 \div 8 = 8$; J, $8 \times 9 = 72$; K, $3 \times 7 = 21$; L, $100 \div 10 = 10$; M, $16 \div 4 = 4$; N, $9 \times 6 = 54$; O, $36 \div 6 = 6$; P, $72 \div 8 = 9$; Q, $3 \times 6 = 18$; R, $80 \div 10 = 8$; S, $49 \div 7 = 7$; T, $14 \div 2 = 7$; U, $90 \div 9 = 10$; V, $9 \times 9 = 81$; W, $5 \times 8 = 40$; X, $54 \div 9 = 6$; Y, $10 \div 5 = 2$; Z, $7 \times 9 = 63$; Capital A, $27 \div 3 = 9$; B, $9 \times 5 = 45$; C, $81 \div 9 = 9$; D, $45 \div 5 = 9$.

EXERCISE 2: FRACTIONS

ADDING WHOLE NUMBERS AND FRACTIONS

REMEDY

- a. (Display:) [42:2A]

$$7 + \frac{5}{2}$$

- (Point to $7 + \frac{5}{2}$.) Read this problem. (Signal.) $7 + 5/2$.
- Do 7 and $5/2$ have the same bottom number? (Signal.) No.
- So you can't work the problem unless you rewrite the whole number as a fraction. What bottom number will you write? (Signal.) 2.
- b. So you rewrite 7 as a fraction with a bottom number of 2.

(Add to show:) [42:2B]

$$\frac{7}{2} + \frac{5}{2}$$

- Raise your hand when you know the top number of the fraction. ✓
- What's the top number? (Signal.) 14.

(Add to show:) [42:2C]

$$\frac{14}{2} + \frac{5}{2}$$

- c. Read the fraction addition problem. (Signal.) $14/2 + 5/2$.
- Can you work that problem? (Signal.) Yes.
 - What's $14/2 + 5/2$? (Signal.) $19/2$.

(Add to show:) [42:2D]

$$\frac{14}{2} + \frac{5}{2} = \frac{19}{2}$$

- What does $7 + 5/2$ equal? (Signal.) $19/2$.

d. (Display:) [42:2E]

$$3 + \frac{2}{9}$$

- (Point to $3 + \frac{2}{9}$.) Read this problem. (Signal.) $3 + 2/9$.
 - Can you add $3 + 2/9$? (Signal.) No.
 - So you have to rewrite 3 as a fraction. What's the bottom number of that fraction? (Signal.) 9.
- (Add to show:) [42:2F]

$$\frac{3}{9} + \frac{2}{9}$$

- Raise your hand when you know the top number of the fraction. ✓
- What's the top number? (Signal.) 27.

(Add to show:) [42:2G]

$$\frac{27}{9} + \frac{2}{9}$$

- e. Read the fraction addition problem. (Signal.) $27/9 + 2/9$.

What's $27/9 + 2/9$? (Signal.) $29/9$. (Add to show:) [42:2H]

$$\frac{27}{9} + \frac{2}{9} = \frac{29}{9}$$

- Read the equation. (Signal.) $27/9 + 2/9 = 29/9$.
- What does $3 + 2/9$ equal? (Signal.) $29/9$. (If students are 100% skip to Exercise 3.)

f. (Display:) [42:2I]

$$4 + \frac{5}{3}$$

- (Point to $4 + \frac{5}{3}$.) Read this problem. (Signal.) $4 + 5/3$.
- Can you add $4 + 5/3$? (Signal.) No.
- So you have to rewrite 4 as a fraction. What's the bottom number of that fraction? (Signal.) 3. (Add to show:) [42:2J]

$$\frac{4}{3} + \frac{5}{3}$$

- Raise your hand when you know the top number of the fraction. ✓
- What's the top number? (Signal.) 12. (Add to show:) [42:2K]

$$\frac{12}{3} + \frac{5}{3}$$

- g. Read the fraction addition problem. (Signal.) $12/3 + 5/3$.
- What's $12/3 + 5/3$? (Signal.) $17/3$. (Add to show:) [42:2L]

$$\frac{12}{3} + \frac{5}{3} = \frac{17}{3}$$

- Read the equation. (Signal.) $12/3 + 5/3 = 17/3$.
- What does $4 + 5/3$ equal? (Signal.) $17/3$.

EXERCISE 3: MULTIPLICATION BY TENS NUMBERS

REMEDY

- a. Find part 3 in your workbook. ✓
(Teacher reference:)

Part I

a. $\begin{array}{r} 7 \\ \times 5 \\ \hline \end{array}$ b. $\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$ c. $\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$ d. $\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$

e. $\begin{array}{r} 7 \\ \times 50 \\ \hline \end{array}$ f. $\begin{array}{r} 2 \\ \times 80 \\ \hline \end{array}$ g. $\begin{array}{r} 7 \\ \times 90 \\ \hline \end{array}$ h. $\begin{array}{r} 5 \\ \times 60 \\ \hline \end{array}$

The problems in the top row do not multiply by tens numbers. Below are problems that multiply by tens numbers.

- b. For each problem in the top row, you'll read the problem and say the answer.
- Problem A. (Signal.) $7 \times 5 = 35$.
 - Problem B. (Signal.) $2 \times 8 = 16$.
 - Problem C. (Signal.) $7 \times 9 = 63$.
 - Problem D. (Signal.) $5 \times 6 = 30$.

- c. Write answers to the problems in the top row. (Observe students and give feedback.)
- d. Touch and read problem E. (Signal.) 7×50 .
- Does problem E multiply by a tens number? (Signal.) Yes.
 - What tens number? (Signal.) 50. So you'll write zero in the ones column. Then you'll work the problem 7×5 .
 - What will you write in the ones column? (Signal.) Zero.
 - Then you'll work what problem? (Signal.) 7×5 . (Repeat until firm.)
- e. Work problem E. (Observe students and give feedback.)
- Problem E: $7 \times 5 = 35$. So what's 7×50 ? (Signal.) 350. (Display:) [42:3A]

$$\begin{array}{r} e. \quad 7 \\ \times 50 \\ \hline 350 \end{array}$$

- Here's what you should have for problem E.
- f. Touch and read problem F. (Signal.) 2×80 .
- Does problem F multiply by a tens number? (Signal.) Yes.
 - What will you write in the ones column? (Signal.) Zero.
 - Then you'll work what problem? (Signal.) 2×8 .
- g. Work problem F. (Observe students and give feedback.)
- Problem F: $2 \times 8 = 16$. So what's 2×80 ? (Signal.) 160. (If students are 100%, skip to step i.)
- h. Touch and read problem G. (Signal.) 7×90 .
- Does problem G multiply by a tens number? (Signal.) Yes.
 - So what will you write in the ones column? (Signal.) Zero.
 - Then you'll work what problem? (Signal.) 7×9 .
- i. Work problem G. (Observe students and give feedback.)
- Problem G: $7 \times 9 = 63$. So what's 7×90 ? (Signal.) 630. (If students are 100%, skip to step k.)
- j. Touch and read problem H. (Signal.) 5×60 .
- What will you write in the ones column? (Signal.) Zero.
 - Then you'll work what problem? (Signal.) 5×6 .

- k. Work problem H.
(Observe students and give feedback.)
- Problem H: $5 \times 6 = 30$. So what's 5×60 ?
(Signal.) 300.
(Display:) [42:3B]

$$\begin{array}{r} \text{f.} \quad 2 \\ \times 80 \\ \hline 160 \end{array} \quad \begin{array}{r} \text{g.} \quad 7 \\ \times 90 \\ \hline 630 \end{array} \quad \begin{array}{r} \text{h.} \quad 5 \\ \times 60 \\ \hline 300 \end{array}$$

Here's what you should have for problems F, G, and H.

EXERCISE 4: DIVISION

WORKING REMAINDER PROBLEMS

- a. Find part 4 in your workbook. ✓
(Teacher reference:)
- a. $9 \overline{)37}$ b. $2 \overline{)11}$ c. $4 \overline{)15}$ d. $3 \overline{)22}$
- These are division problems that have leftovers.
- Read problem A. (Signal.) $37 \div 9$.
 - Can you divide 37 by 9? (Signal.) No.
 - Write the largest part below and write the leftovers. Stop when you've done that much. (Observe students and give feedback.)
 - What's the largest part of 37 you can divide by 9? (Signal.) 36.
 - How many leftovers are there? (Signal.) 1.
(Display:) [42:4A]

$$\text{a. } 9 \overline{)37} \begin{array}{r} 4 \\ \hline 36 \\ \hline 1 \end{array}$$

Here's the largest part and the leftovers.

- b. Now you have to work a division problem and write the answer above.
- Say the division problem you'll work. (Signal.) $36 \div 9$.
 - Write the answer. ✓
(Add to show:) [42:4B]

$$\text{a. } 9 \overline{)37} \begin{array}{r} 4 \quad 1 \\ \hline 36 \\ \hline \end{array}$$

Here's what you should have for problem A. 37 divided by 9 equals 4 and 1 leftover.

- c. Read problem B. (Signal.) $11 \div 2$.
- Can you divide 11 by 2? (Signal.) No.
 - Write the largest part below and write the remainder. The remainder is the number for the leftovers. Stop when you've done that much. (Observe students and give feedback.)
 - What's the largest part of 11 you can divide by 2? (Signal.) 10.
 - How many leftovers are there? (Signal.) 1.
(Display:) [42:4C]

$$\text{b. } 2 \overline{)11} \begin{array}{r} 5 \\ \hline 10 \\ \hline 1 \end{array}$$

- d. Now you have to work a division problem and write the answer above.
- Say the division problem you'll work. (Signal.) $10 \div 2$.
 - Write the answer. ✓
(Add to show:) [42:4D]

$$\text{b. } 2 \overline{)11} \begin{array}{r} 5 \quad 1 \\ \hline 10 \\ \hline \end{array}$$

Here's what you should have for problem B.

- e. Work problem C. First write the largest part and the remainder. Then write the answer to the division problem you work. (Observe students and give feedback.)
- f. Check your work.
- Problem C is $15 \div 4$. Say the division problem you worked. (Signal.) $12 \div 4$.
 - What's the answer? (Signal.) 3.
 - How many leftovers are there? (Signal.) 3.
(Display:) [42:4E]

$$\text{c. } 4 \overline{)15} \begin{array}{r} 3 \quad 3 \\ \hline 12 \\ \hline \end{array}$$

Here's what you should have for problem C.

- g. Work problem D. First write the largest part and the remainder. Then write the answer to the division problem you work. (Observe students and give feedback.)

- h. Check your work.
- Problem D is $22 \div 3$. Say the division problem you worked. (Signal.) $21 \div 3$.
 - What's the answer? (Signal.) 7.
 - How many leftovers are there? (Signal.) 1. (Display:) [42:4F]

$$\text{d. } 3 \overline{) 22} \begin{array}{r} 7 \\ 1 \end{array}$$

Here's what you should have for problem D.

EXERCISE 5: MULTIPLICATION FACTS

- a. Find part 5 in your workbook. ✓
(Teacher reference:)
- | | | | | |
|-------------------|-------------------|--------------------|---------------------|-------------------|
| a. $8 \times 9 =$ | g. $9 \times 4 =$ | m. $3 \times 3 =$ | s. $9 \times 10 =$ | y. $9 \times 7 =$ |
| b. $3 \times 7 =$ | h. $8 \times 0 =$ | n. $5 \times 7 =$ | t. $3 \times 9 =$ | z. $8 \times 5 =$ |
| c. $4 \times 6 =$ | i. $6 \times 4 =$ | o. $3 \times 8 =$ | u. $7 \times 3 =$ | A. $4 \times 4 =$ |
| d. $7 \times 9 =$ | j. $9 \times 9 =$ | p. $4 \times 9 =$ | v. $9 \times 2 =$ | B. $6 \times 9 =$ |
| e. $8 \times 3 =$ | k. $4 \times 3 =$ | q. $6 \times 3 =$ | w. $10 \times 10 =$ | c. $9 \times 8 =$ |
| f. $7 \times 2 =$ | l. $6 \times 6 =$ | r. $7 \times 10 =$ | x. $1 \times 6 =$ | D. $3 \times 6 =$ |

Some of these multiplication problems are from families we worked with in this lesson. You'll read some of the problems and say the answer.

- Read problem A. (Signal.) 8×9 .
 - What's the answer? (Signal.) 72.
- b. (Repeat the following tasks for problems B through L:)

Problem ___		What's the answer?
B	3×7	21
C	4×6	24
D	7×9	63
E	8×3	24

(If students are 100%, skip to step c.)

F	7×2	14
G	9×4	36
H	8×0	0
I	6×4	24
J	9×9	81
K	4×3	12
L	6×6	36

(Repeat problems that were not firm.)

- c. Write all of the answers to the problems in part 5. You have two minutes.
- Get ready. Go. (Observe students and give feedback.)
 - (After 2 minutes say:) Stop.

- d. Check your work. You'll read the fact for each problem.
- Problem A. (Signal.) $8 \times 9 = 72$.
 - (Repeat for:) B, $3 \times 7 = 21$; C, $4 \times 6 = 24$; D, $7 \times 9 = 63$; E, $8 \times 3 = 24$; F, $7 \times 2 = 14$; G, $9 \times 4 = 36$; H, $8 \times 0 = 0$; I, $6 \times 4 = 24$; J, $9 \times 9 = 81$; K, $4 \times 3 = 12$; L, $6 \times 6 = 36$; M, $3 \times 3 = 9$; N, $5 \times 7 = 35$; O, $3 \times 8 = 24$; P, $4 \times 9 = 36$; Q, $6 \times 3 = 18$; R, $7 \times 10 = 70$; S, $9 \times 10 = 90$; T, $3 \times 9 = 27$; U, $7 \times 3 = 21$; V, $9 \times 2 = 18$; W, $10 \times 10 = 100$; X, $1 \times 6 = 6$; Y, $9 \times 7 = 63$; Z, $8 \times 5 = 40$; Capital A, $4 \times 4 = 16$; B, $6 \times 9 = 54$; C, $9 \times 8 = 72$; D, $3 \times 6 = 18$.

EXERCISE 6: FRACTIONS

AS DIVISION

REMEDY

- a. (Display:) [42:6A]

$$\frac{9}{6} \qquad \frac{3}{10}$$

$$\frac{12}{4} \qquad \frac{45}{6}$$

- (Point to $\frac{9}{6}$.) Read this fraction. (Signal.) $9/6$.
 - (Point to $\frac{12}{4}$.) Read this fraction. (Signal.) $12/4$.
 - (Point to $\frac{3}{10}$.) Read this fraction. (Signal.) $3/10$.
 - (Point to $\frac{45}{6}$.) Read this fraction. (Signal.) $45/6$.
- b. Here's a rule about fractions: You can write any fraction as a division problem.
- (Point to $\frac{9}{6}$.) I'll say the division problem for 9 sixths. 9 divided by 6. Say the division problem. (Signal.) $9 \div 6$.
 - (Point to $\frac{12}{4}$.) Say the division problem for $12/4$. (Signal.) $12 \div 4$.
 - (Point to $\frac{3}{10}$.) Say the division problem for $3/10$. (Signal.) $3 \div 10$.
 - (Point to $\frac{45}{6}$.) Say the division problem for $45/6$. (Signal.) $45 \div 6$.
- (Repeat step b until firm.)

- c. (Add to show:) [42:6B]

$$\begin{array}{cc} \frac{9}{6} & \square \\ \frac{3}{10} & \square \\ \frac{12}{4} & \square \\ \frac{45}{6} & \square \end{array}$$

This time, you'll say the division problem, and I'll write it.

- (Point to $\frac{9}{6}$.) Say the division problem for 9/6. (Signal.) $9 \div 6$. (Add to show:) [42:6C]

$$\begin{array}{cc} \frac{9}{6} & 6 \overline{)9} \\ \frac{3}{10} & \square \\ \frac{12}{4} & \square \\ \frac{45}{6} & \square \end{array}$$

- d. (Point to $\frac{12}{4}$.) Say the division problem for 12/4. (Signal.) $12 \div 4$. (Add to show:) [42:6D]

$$\begin{array}{cc} \frac{9}{6} & 6 \overline{)9} \\ \frac{3}{10} & \square \\ \frac{12}{4} & 4 \overline{)12} \\ \frac{45}{6} & \square \end{array}$$

- e. (Point to $\frac{3}{10}$.) Say the division problem for 3/10. (Signal.) $3 \div 10$. (Add to show:) [42:6E]

$$\begin{array}{cc} \frac{9}{6} & 6 \overline{)9} \\ \frac{3}{10} & 10 \overline{)3} \\ \frac{12}{4} & 4 \overline{)12} \\ \frac{45}{6} & \square \end{array}$$

- f. (Point to $\frac{45}{6}$.) Say the division problem for 45/6. (Signal.) $45 \div 6$. (Add to show:) [42:6F]

$$\begin{array}{cc} \frac{9}{6} & 6 \overline{)9} \\ \frac{3}{10} & 10 \overline{)3} \\ \frac{12}{4} & 4 \overline{)12} \\ \frac{45}{6} & 6 \overline{)45} \end{array}$$

TEXTBOOK PRACTICE

- a. Open your textbook to Lesson 42 and find part 1. ✓ (Teacher reference:)

a. $\frac{12}{6}$ b. $\frac{20}{4}$ c. $\frac{30}{7}$ d. $\frac{13}{2}$

Part 1			
a	b	c	d

For each fraction, you'll write the division problems on your lined paper.

- Read fraction A. (Signal.) $12/6$.
- Say the division problem for 12/6. (Signal.) $12 \div 6$.
- b. Read fraction B. (Signal.) $20/4$.
- Say the division problem for 20/4. (Signal.) $20 \div 4$. (If students have been firm on saying division problems for fractions for at least two lessons, skip to step e.)

- c. Read fraction C. (Signal.) $30/7$.
- Say the division problem for 30/7. (Signal.) $30 \div 7$.
- d. Read fraction D. (Signal.) $13/2$.
- Say the division problem for 13/2. (Signal.) $13 \div 2$. (Repeat problems that were not firm.)

- e. Write part 1 on your lined paper with the letters A through D below. Then write the division problem for each fraction. Do not work the division problems. Just write them. (Observe students and give feedback.)
- f. Check your work. You'll read the division problem you wrote.
 - Problem A. (Signal.) $12 \div 6$.
 - Problem B. (Signal.) $20 \div 4$.
 - Problem C. (Signal.) $30 \div 7$.
 - Problem D. (Signal.) $13 \div 2$.

EXERCISE 7: WORD PROBLEMS

ADDITION/SUBTRACTION—MISSING FIRST SMALL NUMBER MIX

- a. Find part 2 in your textbook. ✓
(Teacher reference:)

Problems

- a. The dog weighed 319 ounces. The cat weighed 374 ounces. How much more did the cat weigh than the dog?
- b. Dessi had some money. Dessi spent \$113. Dessi ended up with \$197. How much money did Dessi have to begin with?
- c. There were 543 bottles on a shelf. Some of those bottles were taken off of the shelf. The shelf now has 261 bottles on it. How many bottles were taken off of the shelf?
- d. The building was 28 meters shorter than the hill. The building was 67 meters tall. How tall was the hill?

Part 2	
a.	→
b.	→
c.	→
d.	→

You'll make addition number families to work these problems.

- Write part 2 on your lined paper with the letters A through D below. Make an addition number family arrow after each letter.
(Observe students and give feedback.)
 - Some of the problems in part 2 do not give the first small number. For each problem, you'll tell me if you'll write a family with the letters E and S. Then you'll tell me if you'll write the first small number in the family.
 - Read problem A. (Call on a student.) *The dog weighed 319 ounces. The cat weighed 374 ounces. How much more did the cat weigh than the dog?*
 - Will you make a number family with the letters for start and end? (Signal.) *No.*
 - Does the problem give the first small number in the family? (Signal.) *No.*
(If students have performed perfectly on word problems for at least two lessons, skip to step f.)
- c. Read problem B. (Call on a student.) *Dessi had some money. Dessi spent 113 dollars. Dessi ended up with 197 dollars. How much money did Dessi have to begin with?*

 - Will you make a number family with the letters for start and end? (Signal.) *Yes.*
 - Does the problem give the first small number in the family? (Signal.) *Yes.*

d. Read problem C. (Call on a student.) *There were 543 bottles on a shelf. Some of those bottles were taken off of the shelf. The shelf now has 261 bottles on it. How many bottles were taken off of the shelf?*

 - Will you make a number family with the letters for start and end? (Signal.) *Yes.*
 - Does the problem give the first small number in the family? (Signal.) *No.*

- Read problem D. (Call on a student.) *The building was 28 meters shorter than the hill. The building was 67 meters tall. How tall was the hill?*
 - Will you make a number family with the letters for start and end? (Signal.) *No.*
 - Does the problem give the first small number in the family? (Signal.) *Yes.*
(Repeat problems that were not firm.)
- Work all the problems. Put your pencil down when you've completed part 2.
(Observe students and give feedback.)
- Check your work for problem A.
 - What letter did you write for the big number? (Signal.) *C.*
 - What letter did you write for a small number? (Signal.) *D.*
 - Read the column problem and the answer. (Signal.) $374 - 319 = 55$.
 - How much more did the cat weigh than the dog? (Signal.) *55 ounces.*
(Display:)

[42:7A]

Part 2	
a.	$\begin{array}{r} 319 \\ \underline{d\ 374} \\ \end{array}$ $\begin{array}{r} 6 \\ 3\cancel{7}4 \\ - 319 \\ \hline 55 \text{ ounces} \end{array}$

Here's what you should have for problem A.

- Check your work for problem B.
 - What letter did you write for the big number? (Signal.) *S.*
 - What letter did you write for a small number? (Signal.) *E.*
 - What number did you write for the first small number? (Signal.) *113.*
 - Read the column problem and the answer. (Signal.) $113 + 197 = 310$.
 - How much did Dessi have to begin with? (Signal.) *310 dollars.*
(Display:)

[42:7B]

b.	$\begin{array}{r} 197 \\ \underline{E\ 113} \\ \end{array}$ $\begin{array}{r} 1\ 1 \\ \$113 \\ + 197 \\ \hline \$310 \end{array}$
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Here's what you should have for problem B.

- d. Decimal number B is 500 and 6 tenths. What number? (Signal.) *500 and 6 tenths*.
- Write the number for B. ✓
 - Touch and read the symbols you wrote for decimal number B. (Signal.) *5, 0, 0, decimal point, 6*.
- e. Decimal number C is 500 and 60 hundredths. What number? (Signal.) *500 and 60 hundredths*.
- Write the number for C. ✓
 - Touch and read the symbols you wrote for decimal number C. (Signal.) *5, zero, zero, decimal point, 6, zero*.
- f. Decimal number D is 18 and 3 hundredths. What number? (Signal.) *18 and 3 hundredths*.
- Write the number for D. ✓
 - Touch and read the symbols you wrote for decimal number D. (Signal.) *1, 8, decimal point, zero, 3*.
- g. Decimal number E is 20 and 8 tenths. What number? (Signal.) *20 and 8 tenths*.
- Write the number for E. ✓
 - Touch and read the symbols you wrote for decimal number E. (Signal.) *2, zero, decimal point, 8*.
- h. Decimal number F is 417 and zero tenths. What number? (Signal.) *417 and zero tenths*.
- Write the number for F. ✓
 - Touch and read the symbols you wrote for decimal number F. (Signal.) *4, 1, 7, decimal point, zero*.

(Display:) [42:9A]

Part 4		
a.	13.12	d. 18.03
b.	500.6	e. 20.8
c.	500.60	f. 417.0

Here's what you should have for part 4.

- i. Now you'll read all the decimal numbers you wrote for part 4.
- Read number A. (Signal.) *13 and 12 hundredths*.
 - Read number B. (Signal.) *500 and 6 tenths*.
 - Read number C. (Signal.) *500 and 60 hundredths*.
 - Read number D. (Signal.) *18 and 3 hundredths*.
 - Read number E. (Signal.) *20 and 8 tenths*.
 - Read number F. (Signal.) *417 and zero tenths*.

EXERCISE 10: INDEPENDENT WORK

MIXED COMPUTATION

- a. Find part 5 in your textbook. ✓
(Teacher reference:)

Part 5					
a.	$\begin{array}{r} \$70.15 \\ - 9.09 \\ \hline \end{array}$	d. $\begin{array}{r} 2\overline{)68} \\ \underline{40} \\ 28 \\ \underline{28} \\ 0 \end{array}$	g.	$\begin{array}{r} 10 \\ \times 640 \\ \hline \end{array}$	
b.	$\begin{array}{r} 64 \\ \times 3 \\ \hline \end{array}$	e.	$\begin{array}{r} 509 \\ \times 7 \\ \hline \end{array}$	h.	$\begin{array}{r} 81.4 \\ - 77.7 \\ \hline \end{array}$
c.	$\begin{array}{r} 5.8 \\ 20.9 \\ + 482.3 \\ \hline \end{array}$	f.	$\begin{array}{r} 3\overline{)189} \\ \underline{90} \\ 99 \\ \underline{99} \\ 0 \end{array}$	i.	$\begin{array}{r} \$8.96 \\ + 1.05 \\ \hline \end{array}$

You'll copy part 5 and work the problems. Be careful. Part 5 has addition, subtraction, multiplication, and division problems. Some of the problems are money problems, and some are decimal problems.

Assign Independent Work, Textbook parts 5–9.

Optional extra math-fact practice worksheets for all lessons are available on ConnectED.

Lesson 42

Part 1

a. $3 \overline{) 8}$ d. $\overline{) 4} 12$ g. $9 \overline{) 4}$ j. $3 \overline{) 18}$
 b. $\overline{) 6} 36$ e. $9 \overline{) 81}$ h. $\overline{) 8} 24$ k. $2 \overline{) 9}$
 c. $9 \overline{) 6}$ f. $3 \overline{) 7}$ i. $\overline{) 8} 72$ l. $\overline{) 7} 63$

Part 2

a. $8 \times 3 =$ g. $5 \times 5 =$ m. $4 \overline{) 16}$ s. $7 \overline{) 49}$ y. $5 \overline{) 10}$
 b. $9 \times 4 =$ h. $3 \overline{) 27}$ n. $9 \times 6 =$ t. $2 \overline{) 14}$ z. $7 \times 9 =$
 c. $9 \overline{) 18}$ i. $8 \overline{) 64}$ o. $6 \overline{) 36}$ u. $9 \overline{) 90}$ A. $3 \overline{) 27}$
 d. $3 \overline{) 21}$ j. $8 \times 9 =$ p. $8 \overline{) 72}$ v. $9 \times 9 =$ B. $9 \times 5 =$
 e. $4 \times 4 =$ k. $3 \times 7 =$ q. $3 \times 6 =$ w. $5 \times 8 =$ C. $9 \overline{) 81}$
 f. $3 \overline{) 9}$ l. $10 \overline{) 100}$ r. $10 \overline{) 80}$ x. $9 \overline{) 54}$ D. $5 \overline{) 45}$

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Part 3

a. $\begin{array}{r} 7 \\ \times 5 \\ \hline \end{array}$ b. $\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$ c. $\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$ d. $\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$
 e. $\begin{array}{r} 7 \\ \times 50 \\ \hline \end{array}$ f. $\begin{array}{r} 2 \\ \times 80 \\ \hline \end{array}$ g. $\begin{array}{r} 7 \\ \times 90 \\ \hline \end{array}$ h. $\begin{array}{r} 5 \\ \times 60 \\ \hline \end{array}$

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Lesson 42

Part 4

a. $9 \overline{) 37}$ b. $2 \overline{) 11}$ c. $4 \overline{) 15}$ d. $3 \overline{) 22}$

Part 5

a. $8 \times 9 =$ g. $9 \times 4 =$ m. $3 \times 3 =$ s. $9 \times 10 =$ y. $9 \times 7 =$
 b. $3 \times 7 =$ h. $8 \times 0 =$ n. $5 \times 7 =$ t. $3 \times 9 =$ z. $8 \times 5 =$
 c. $4 \times 6 =$ i. $6 \times 4 =$ o. $3 \times 8 =$ u. $7 \times 3 =$ A. $4 \times 4 =$
 d. $7 \times 9 =$ j. $9 \times 9 =$ p. $4 \times 9 =$ v. $9 \times 2 =$ B. $6 \times 9 =$
 e. $8 \times 3 =$ k. $4 \times 3 =$ q. $6 \times 3 =$ w. $10 \times 10 =$ C. $9 \times 8 =$
 f. $7 \times 2 =$ l. $6 \times 6 =$ r. $7 \times 10 =$ x. $1 \times 6 =$ D. $3 \times 6 =$

Lesson 43

Part 1

a. $4 \overline{) 24}$ g. $8 \overline{) 16}$ m. $9 \overline{) 72}$ s. $9 \overline{) 90}$ y. $3 \overline{) 6}$
 b. $3 \overline{) 24}$ h. $4 \overline{) 16}$ n. $9 \times 6 =$ t. $3 \overline{) 12}$ z. $7 \overline{) 63}$
 c. $8 \times 9 =$ i. $7 \times 3 =$ o. $9 \overline{) 45}$ u. $9 \times 4 =$ A. $6 \overline{) 24}$
 d. $2 \overline{) 18}$ j. $7 \times 9 =$ p. $3 \times 9 =$ v. $10 \overline{) 100}$ B. $5 \times 9 =$
 e. $3 \overline{) 18}$ k. $4 \overline{) 36}$ q. $3 \overline{) 9}$ w. $9 \overline{) 54}$ C. $9 \overline{) 81}$
 f. $4 \times 3 =$ l. $6 \overline{) 36}$ r. $3 \overline{) 21}$ x. $3 \times 6 =$ D. $3 \times 8 =$

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Lesson 42

Part 1

a. $\frac{12}{6}$

b. $\frac{20}{4}$

c. $\frac{30}{7}$

d. $\frac{13}{2}$

Part 1			
a.	b.	c.	d.

Part 2

Problems

- a. The dog weighed 319 ounces. The cat weighed 374 ounces. How much more did the cat weigh than the dog?
- b. Dessi had some money. Dessi spent \$113. Dessi ended up with \$197. How much money did Dessi have to begin with?
- c. There were 543 bottles on a shelf. Some of those bottles were taken off of the shelf. The shelf now has 261 bottles on it. How many bottles were taken off of the shelf?
- d. The building was 28 meters shorter than the hill. The building was 67 meters tall. How tall was the hill?

Part 2	
a.	→
b.	→
c.	→
d.	→

Part 3

Part 3		
a. $4 \overline{)18}$	c. $9 \overline{)18}$	e. $8 \overline{)16}$
b. $3 \overline{)18}$	d. $5 \overline{)18}$	f. $10 \overline{)54}$

Lesson 42

Part 4

Descriptions

- a. Decimal number a is thirteen and twelve hundredths.
- b. Decimal number b is five hundred and six tenths.
- c. Decimal number c is five hundred and sixty hundredths.
- d. Decimal number d is eighteen and three hundredths.
- e. Decimal number e is twenty and eight tenths.
- f. Decimal number f is four hundred seventeen and zero tenths.

Part 4	
a.	d.
b.	e.
c.	f.

Independent Work

Part 5 Copy Part 5 and work the problems.

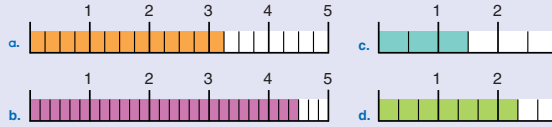
Part 5		
a. $\begin{array}{r} \$70.15 \\ - 9.09 \\ \hline \end{array}$	d. $2 \overline{)68}$	g. $\begin{array}{r} 10 \\ \times 640 \\ \hline \end{array}$
b. $\begin{array}{r} 64 \\ \times 3 \\ \hline \end{array}$	e. $\begin{array}{r} 509 \\ \times 7 \\ \hline \end{array}$	h. $\begin{array}{r} 81.4 \\ - 77.7 \\ \hline \end{array}$
c. $\begin{array}{r} 5.8 \\ 20.9 \\ + 482.3 \\ \hline \end{array}$	f. $3 \overline{)189}$	i. $\begin{array}{r} \$8.96 \\ + 1.05 \\ \hline \end{array}$

Lesson 42

Part 6 Copy Part 6. Then write the column problem for finding each missing number and work it. Write the missing numbers in the table.

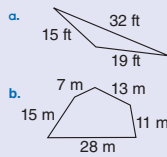
Part 6		
76		
231	159	
	277	

Part 7 For each number line, write the fraction and complete the equation to show the mixed number it equals.



Part 7	
a.	c.
b.	d.

Part 8 Write the column problems for finding the perimeter of each shape and work it.



Part 8	
a.	b.

Lesson 42

Part 9 Copy Part 9. Write the top number for each fraction to complete the equations.

Part 9	
a.	$7 = \frac{\quad}{1} = \frac{\quad}{10} = \frac{\quad}{29} = \frac{\quad}{3}$
b.	$8 = \frac{\quad}{3} = \frac{\quad}{2} = \frac{\quad}{9} = \frac{\quad}{5}$

