Less 42

EXERCISE 1: *NUMBER FAMILIES*
            MULTIPLICATION

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

EXERCISE 2: FRACTIONS
ADDING WHOLE NUMBERS AND FRACTIONS

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]

$$\frac{\quad}{2}\,\cancel{7} + \frac{5}{2}$$

•   Raise your hand when you know the top
    number of the fraction. ✔
•   What's the top number? (Signal.) *14.*
    (Add to show:)   [42:2C]

$$\frac{14}{2}\,\cancel{7} + \frac{5}{2}$$

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]

f. (Display:)

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

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

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

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 ÷ 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]

$$
\textbf{a.}\quad 9\overline{)37}\ \overset{1}{} \\ 36
$$

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 ÷ 9.*
• Write the answer. ✔
(Add to show:) [42:4B]

$$
\textbf{a.}\quad 9\overline{)37}\ \overset{4\ \ 1}{} \\ 36
$$

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

c. Read problem B. (Signal.) *11 ÷ 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]

$$
\textbf{b.}\quad 2\overline{)11}\ \overset{1}{} \\ 10
$$

d. Now you have to work a division problem and write the answer above.
• Say the division problem you'll work. (Signal.) *10 ÷ 2.*
• Write the answer. ✔
(Add to show:) [42:4D]

$$
\textbf{b.}\quad 2\overline{)11}\ \overset{5\ \ 1}{} \\ 10
$$

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 ÷ 4. Say the division problem you worked. (Signal.) *12 ÷ 4.*
• What's the answer? (Signal.) *3.*
• How many leftovers are there? (Signal.) *3.*
(Display:) [42:4E]

$$
\textbf{c.}\quad 4\overline{)15}\ \overset{3\ \ 3}{} \\ 12
$$

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Here's what you should have for problem C.
g. Work problem D Then write the answer to

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

$$\begin{array}{r} 7\ \underline{1} \\ \text{d. } 3\overline{)2\ 2} \\ 2\ 1 \end{array}$$

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

$$\frac{9}{6} \quad \overline{\lceil\quad} \qquad \frac{3}{10} \quad \overline{\lceil\quad}$$

$$\frac{12}{4} \quad \overline{\lceil\quad} \qquad \frac{45}{6} \quad \overline{\lceil\quad}$$

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 ÷ 6.*
(Add to show:) [42:6C]

$$\frac{9}{6} \quad 6\overline{\rceil 9} \qquad \frac{3}{10} \quad \overline{\lceil\quad}$$

$$\frac{12}{4} \quad \overline{\lceil\quad} \qquad \frac{45}{6} \quad \overline{\lceil\quad}$$

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

$$\frac{9}{6} \quad 6\overline{\rceil 9} \qquad \frac{3}{10} \quad \overline{\lceil\quad}$$

$$\frac{12}{4} \quad 4\overline{\rceil 1\ 2} \qquad \frac{45}{6} \quad \overline{\lceil\quad}$$

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

$$\frac{9}{6} \quad 6\overline{\rceil 9} \qquad \frac{3}{10} \quad 10\overline{\rceil 3}$$

$$\frac{12}{4} \quad 4\overline{\rceil 1\ 2} \qquad \frac{45}{6} \quad \overline{\lceil\quad}$$

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

$$\frac{9}{6} \quad 6\overline{\rceil 9} \qquad \frac{3}{10} \quad 10\overline{\rceil 3}$$

$$\frac{12}{4} \quad 4\overline{\rceil 1\ 2} \qquad \frac{45}{6} \quad 6\overline{\rceil 4\ 5}$$

━━━━━━ 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.

EXERCISE 7: WORD PROBLEMS

ADDITION/SUBTRACTION, MISSING FIRST SMALL
NUMBER MIX

Find part 2 in your textbook.

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.

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.

Will you make a number family with the letters
for start and end?
Does the problem give the first small number
in the family?

Read problem B.

Will you make a number family with the letters
for start and end?
Does the problem give the first small number
in the family?
Read problem C.

Will you make a number family with the letters
for start and end?
Does the problem give the first small number
in the family?

Read problem D.

Will you make a number family with the letters
for start and end?
Does the problem give the first small number
in the family?

Work all the problems. Put your pencil down
when you•ve completed part 2.
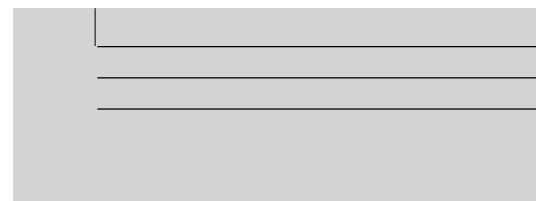
Check your work for problem A.
What letter did you write for the big number?

What letter did you write for a small number?

Read the column problem and the answer.

How much more did the cat weigh than the
dog?

Lesson 42

Part 1

a. $3\overset{8}{\longrightarrow}\underline{\quad}$ d. $\underline{\quad}\overset{4}{\longrightarrow}12$ g. $9\overset{4}{\longrightarrow}\underline{\quad}$ j. $3\overset{\quad}{\longrightarrow}18$

b. $\underline{\quad}\overset{6}{\longrightarrow}36$ e. $9\overset{\quad}{\longrightarrow}81$ h. $\underline{\quad}\overset{8}{\longrightarrow}24$ k. $2\overset{9}{\longrightarrow}\underline{\quad}$

c. $9\overset{6}{\longrightarrow}\underline{\quad}$ f. $3\overset{7}{\longrightarrow}\underline{\quad}$ i. $\underline{\quad}\overset{8}{\longrightarrow}72$ l. $\underline{\quad}\overset{7}{\longrightarrow}63$

Part 2

a. 8 × 3 =   g. 5 × 5 =   m. 4$\overline{)16}$ s. 7$\overline{)49}$ y. 5$\overline{)10}$

b. 9 × 4 =   h. 3$\overline{)27}$ n. 9 × 6 =   t. 2$\overline{)14}$ z. 7 × 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 × 9 =   p. 8$\overline{)72}$ v. 9 × 9 =   B. 9 × 5 =

e. 4 × 4 =   k. 3 × 7 =   q. 3 × 6 =   w. 5 × 8 =   C. 9$\overline{)81}$

f. 3$\overline{)9}$ l. 10$\overline{)100}$ r. 10$\overline{)80}$ x. 9$\overline{)54}$ D. 5$\overline{)45}$

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. $\begin{array}{r}5\\ \times 60\\ \hline\end{array}$

Lesson 42

Part 4

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

Part 5

a. 8 × 9 =	g. 9 × 4 =	m. 3 × 3 =	s. 9 × 10 =	y. 9 × 7 =
b. 3 × 7 =	h. 8 × 0 =	n. 5 × 7 =	t. 3 × 9 =	z. 8 × 5 =
c. 4 × 6 =	i. 6 × 4 =	o. 3 × 8 =	u. 7 × 3 =	A. 4 × 4 =
d. 7 × 9 =	j. 9 × 9 =	p. 4 × 9 =	v. 9 × 2 =	B. 6 × 9 =
e. 8 × 3 =	k. 4 × 3 =	q. 6 × 3 =	w. 10 × 10 =	C. 9 × 8 =
f. 7 × 2 =	l. 6 × 6 =	r. 7 × 10 =	x. 1 × 6 =	D. 3 × 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 × 6 =	t. 3$\overline{)12}$	z. 7$\overline{)63}$
c. 8 × 9 =	i. 7 × 3 =	o. 9$\overline{)45}$	u. 9 × 4 =	A. 6$\overline{)24}$
d. 2$\overline{)18}$	j. 7 × 9 =	p. 3 × 9 =	v. 10$\overline{)100}$	B. 5 × 9 =
e. 3$\overline{)18}$	k. 4$\overline{)36}$	q. 3$\overline{)9}$	w. 9$\overline{)54}$	C. 9$\overline{)81}$
f. 4 × 3 =	l. 6$\overline{)36}$	r. 3$\overline{)21}$	x. 3 × 6 =	D. 3 × 8 =

Lesson 42

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

b.   c.   d.

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?
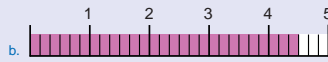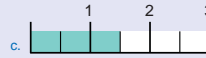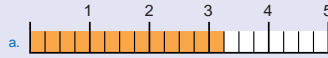
Lesson 42

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

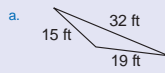|		
	76	
	231	159
		277

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

a.

b.

c.
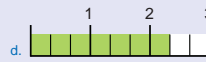
d.

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

a. 32 ft 15 ft 19 ft

b. 7 m 13 m 15 m 11 m 28 m