



MATHEMATICS 407

CONTENTS

I.	MULTIPLICATION, FRACTIONS, NUMBER SENTENCES	1
II.	MULTIPLICATION, FRACTIONS, AVERAGE, NUMBER RULES	9
III.	MULTIPLICATION, FRACTIONS, MISSING NUMBER PROBLEMS	16
IV.	ROUNDING, MULTI-DIGIT NUMBERS, MONEY, SHAPES, PERIMETER, AREA	23
V.	READING, REVIEW, AND REINFORCEMENT . . .	32

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I. PART ONE

Learn Box

I can multiply to 10's by 2 digits.
I can simplify improper fractions.
I can read number sentences.

- 1.1 A **prime number** can be divided only by 1 and itself.
Circle the prime numbers. Remember 1 is not a prime number.



5 8 12 13 18 23 25

- 1.2 A **composite number** can be divided by 1, itself, and other numbers.
Circle the composite numbers. Remember 1 is not a composite number.

7 13 15 22 27 30 31



- 1.3 **Factors** are numbers that when multiplied together produce a given number.

Write all of the factors of these numbers.

4 _____ 8 _____

10 _____ 16 _____

- 1.4 **Multiples** are the products of given factors.

Write five multiples of each number.

2 _____ 5 _____

7 _____ 9 _____

- 1.5 Find the product of the given factors. An example, if needed, is on the next page.

Multiply from right to left.

If the answer has two digits, write one digit and carry the other.

$$\begin{array}{r} 28 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 804 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 375 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 936 \\ \times 4 \\ \hline \end{array}$$

The multiplication problems on page 1 had one-digit multipliers.



We solve multiplication problems with two-digit multipliers by working two smaller problems. Then, we add the answers together.

$$\begin{array}{r} 54 \\ \times 37 \\ \hline 378 \\ 1,620 \\ \hline 1,998 \end{array}$$

$$\begin{array}{r} 2 \\ 54 \\ \times 7 \\ \hline 378 \end{array}$$

$$\begin{array}{r} 1 \\ 54 \\ \times 3 \\ \hline 162 \end{array}$$

1. Multiply 54 by 7 ones.
2. Put a 0 place holder in the ones' place below the 8.
3. Multiply 54 by 3 tens.
4. Total the products.

1.6 Follow the steps to solve these problems.

a.
$$\begin{array}{r} 78 \\ \times 63 \\ \hline \end{array}$$

1. Multiply 78 by 3 ones.
2. Put a 0 place holder in the ones' place below the _____.
3. Multiply 78 by 6 tens.
4. Total the products.

b.
$$\begin{array}{r} 54 \\ \times 48 \\ \hline \end{array}$$

1. Multiply 54 by _____ ones.
2. Put a _____ place holder in the ones' place below the _____.
3. Multiply 54 by _____ tens.
4. Total the products.

1.7 Multiply by a 2-digit number. Follow the steps.

a.

$$\begin{array}{r} 35 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 26 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ \times 65 \\ \hline \end{array}$$

b.

$$\begin{array}{r} 19 \\ \times 73 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ \times 44 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 78 \\ \hline \end{array}$$

1.8 Review the steps for division by a 1-digit number. Solve.

$$\begin{array}{r} 4 \text{ R}1 \\ 8 \overline{)33} \\ \underline{32} \\ 1 \end{array}$$

1. Divide from left to right.
Find a multiple of 8 smaller than 33.
2. Multiply.
3. Subtract.



a. $6 \overline{)27}$

$8 \overline{)52}$

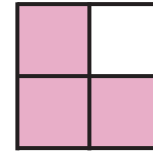
$5 \overline{)41}$

b. $9 \overline{)83}$

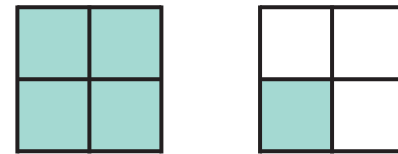
$3 \overline{)26}$

$7 \overline{)39}$

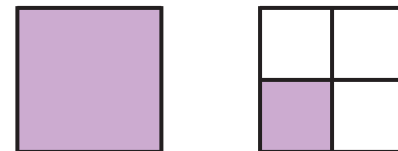
Proper fractions have smaller numerators than denominators. They are smaller than a whole number. $\frac{3}{4} < 1$



Improper fractions have larger numerators than denominators. They are larger than a whole number. $\frac{5}{4} > 1$



Mixed numbers are written with a whole number and a fraction. They are larger than a whole number. $1\frac{1}{4} > 1$

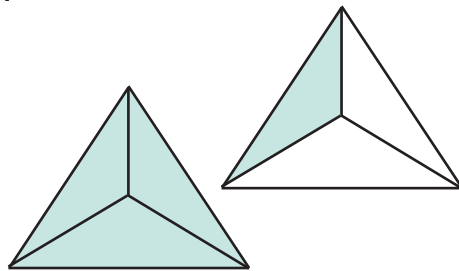


We can use the same illustrations to show

the improper fraction $\frac{5}{4} =$ the mixed number $1\frac{1}{4}$.

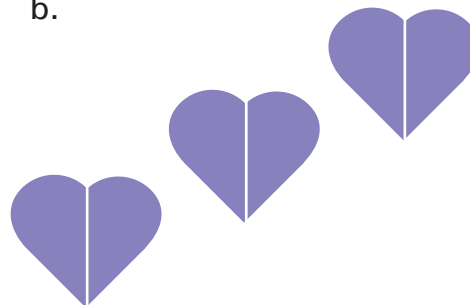
1.9 Write each one of the following as 1) an improper fraction and 2) as a whole number or mixed number.

a.



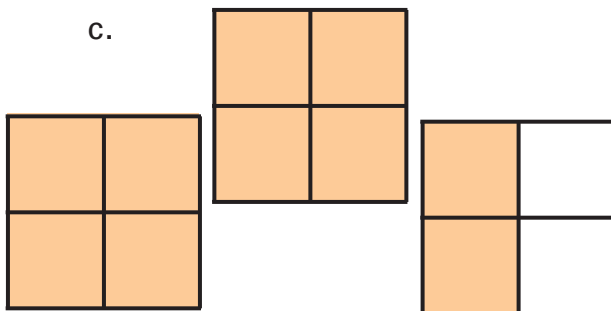
1) _____ 2) _____

b.



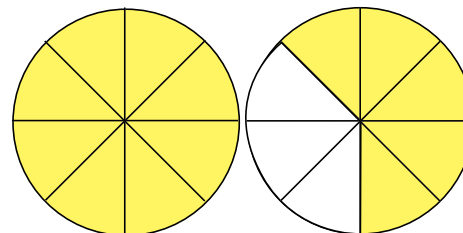
1) _____ 2) _____

c.



1) _____ 2) _____

d.



1) _____ 2) _____