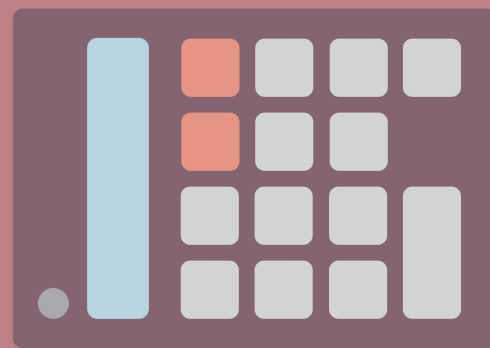




MATH

Student Book



▶ **3rd Grade | Unit 6**

MATH 306

MULTIPLICATION, LINES, AND ANGLES

Introduction |3

1. Addition..... 5

Adding to the Thousands'
Place |6
Patterns |8

Quarter Hour |11
Self Test 1 |12

2. Subtraction 14

Subtracting to the
Thousands' Place |15
Sensible Answers |15

Perimeter and Area |17
Self Test 2 |22

3. Fractions and Money..... 24

Equivalent Fractions |25
Money |28

Roman Numerals |30
Self Test 3 |32

4. Multiplication 34

Multiplication by 2 |34
Graphing |36

Lines |37
Self Test 4 |41

5. Application and Review..... 43

Self Test 5 |50

LIFEPAC Test |Pull-out

NOTE to teachers, parents, and students:

As part of a continuing effort to improve the LIFEPAC curriculum a new layout of this unit has been produced. The content of this unit has not changed but the page numbers referenced in the Teacher Notes of the Teacher's Guide may no longer match.

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MULTIPLICATION, LINES, AND ANGLES

You have already learned many things about numbers. You learned about place values, addition and subtraction of fractions, and how to recognize even and odd numbers. You are able to add and subtract 4-digit numbers and to convert between the standard measures for length. This LIFEPAC[®] will continue to practice and expand your skills in these operations. In this LIFEPAC you will apply your knowledge of multiples to learning the multiplication facts for 2. Measurement of time to the quarter hour and of length to a mile will be studied. You will expand your geometry skills to find perimeter and area and to draw lines, segments, and angles. You will also learn about equivalent fractions.

Objectives

Read these objectives. The objectives tell you what you will be able to do when you have successfully completed this LIFEPAC.

1. I can add and subtract numbers to thousands.
2. I can learn the multiples for 2, 3, 5, and 10.
3. I can learn the meaning of “quarter after” and “quarter to.”
4. I can learn to give sensible answers.
5. I can learn to measure perimeter and area.
6. I can learn about equivalent fractions.
7. I can add and subtract money using dollar and cent signs.

8. I can learn the operation sign for multiplication.
9. I can learn multiplication facts for 2.
10. I can learn about line graphs.
11. I can learn about line segments and angles.

1. ADDITION

Let's review some number skills. In this section, you will practice addition to the thousands' place. You will also review number order, patterns, and skip-counting.



Complete these activities.

1.1 Name each part of the addition problem.

$$\begin{array}{r}
 38 \\
 46 \\
 + 59 \\
 \hline
 143
 \end{array}$$

1.2 Add.

3	24	74	43	
6	36	21	38	321
<u>+ 8</u>	<u>+ 52</u>	<u>+ 60</u>	<u>+ 52</u>	<u>+ 248</u>

473	280	547	285	342
<u>+ 209</u>	<u>+ 450</u>	<u>+ 363</u>	<u>+ 696</u>	673
				<u>+ 428</u>

Adding to the Thousands' Place

We can add numbers to the thousands' place without carrying.

$$\begin{array}{r} 3,625 \\ + 2,071 \\ \hline 5,696 \end{array}$$

Add ones' place. $5 + 1 = 6$

Add tens' place. $2 + 7 = 9$

Add hundreds' place. $6 + 0 = 6$

Add thousands' place. $3 + 2 = 5$

Write the comma to separate thousands from hundreds.

1.3 Add.

$$\begin{array}{r} 4,290 \\ + 3,506 \\ \hline \end{array}$$

$$\begin{array}{r} 2,357 \\ + 6,232 \\ \hline \end{array}$$

$$\begin{array}{r} 5,114 \\ + 4,603 \\ \hline \end{array}$$

$$\begin{array}{r} 1,624 \\ + 4,603 \\ \hline \end{array}$$

We can add numbers to the thousands' place with carrying.

111 Add ones. $6 + 6 = 12$ Write the 2 and carry 1 ten.

4,736 Add tens. $1 + 3 + 9 = 13$ Write the 3 and carry 1 hundred.

$+ 2,496$ Add hundreds. $1 + 7 + 4 = 12$ Write the 2 and carry 1 thousand

$\hline 7,232$ Add thousands. $1 + 4 + 2 = 7$ Write the comma in the sum.

We do not always need to carry each place.

1 1 Add ones. $5 + 8 = 13$ Write the 3 and carry 1 ten.

3,315 Add tens. $1 + 1 + 3 = 5$ Write the 5.

$+ 4,738$ Add hundreds. $3 + 7 = 10$ Write the 0 and carry 1 thousand.

$\hline 8,053$ Add thousands. $1 + 3 + 4 = 8$ Write the comma in the sum.



Complete these problems.

1.4 Add.

$$\begin{array}{r} 2,765 \\ + 3,051 \\ \hline \end{array}$$

$$\begin{array}{r} 4,253 \\ + 2,807 \\ \hline \end{array}$$

$$\begin{array}{r} 6,095 \\ + 2,538 \\ \hline \end{array}$$

$$\begin{array}{r} 5,226 \\ + 3,485 \\ \hline \end{array}$$

$$\begin{array}{r} 7,364 \\ + 1,859 \\ \hline \end{array}$$

$$\begin{array}{r} 6,773 \\ + 2,541 \\ \hline \end{array}$$

$$\begin{array}{r} 3,440 \\ + 2,359 \\ \hline \end{array}$$

$$\begin{array}{r} 1,057 \\ + 2,063 \\ \hline \end{array}$$

1.5 Write the numbers before or after.

_____ 3,860

_____ 5,996

_____ 2,406

5,291 _____

6,399 _____

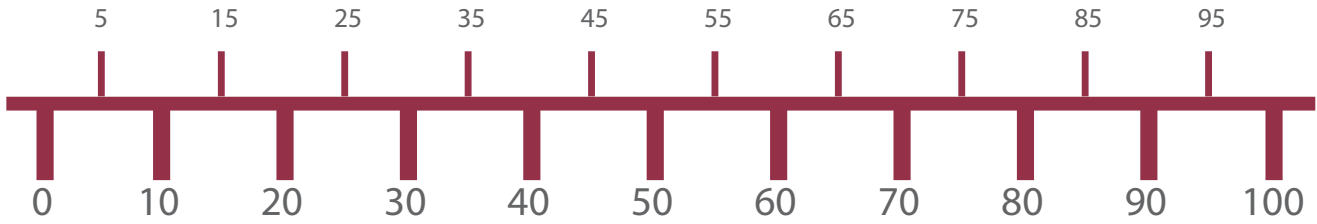
7,999 _____

1.6 Write the numbers in number order. Remember, to arrange numbers in number order, we begin at the left (thousands) and then compare hundreds, tens, and ones.

8,654 8,645 8,456 8,564 6,845 6,458

_____ , _____ , _____ , _____ , _____ , _____

Patterns



When we count by 2's, 3's, 5's, and 10's, we are learning about multiplication.

When we count by 2's, 3's, 5's, and 10's, we are saying the multiples of 2, 3, 5, and 10.



Complete these activities.

1.7 Count by 2's, 3's, 5's, and 10's. Write the multiples.

2 to 20

3 to 30

5 to 50

10 to 100

1.8 Circle the correct numbers.

6 is a multiple of (2, 3, 5, 10).

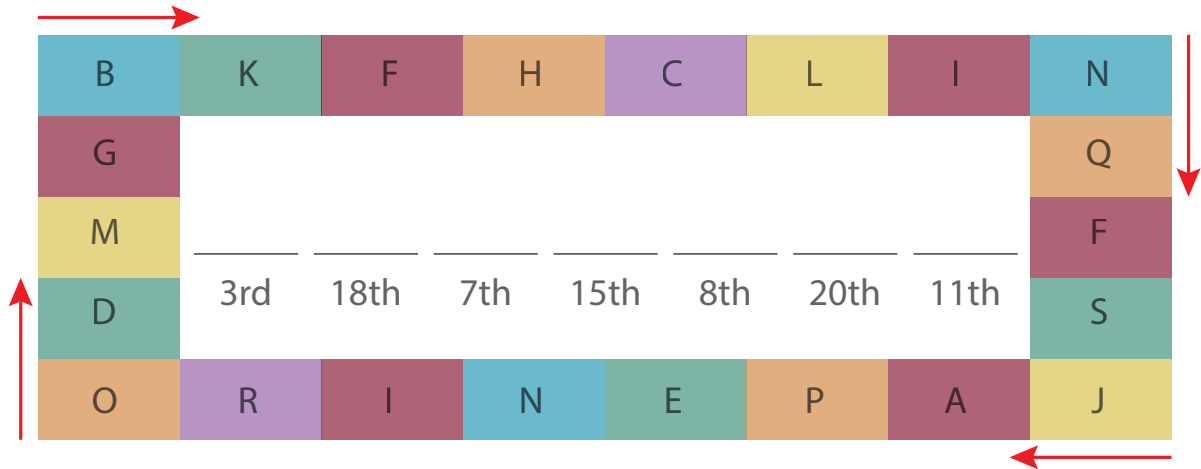
10 is a multiple of (2, 3, 5, 10).

15 is a multiple of (2, 3, 5, 10).

30 is a multiple of (2, 3, 5, 10).

The letters start with B and go around the chart to G. Read the number order of the letters (B is first, K is second, F is third, ...).

- 1.9** Find the letter on the chart and write it on the line. Draw a picture of your answer.



We can find patterns in numbers. Learning patterns helps us understand numbers.

- 1.10** Add. Write E (even) or O (odd) on the line below each number.

$12 + 26 = \underline{\quad}$

$11 + 15 = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$16 + 13 = \underline{\quad}$

$21 + 32 = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

When we add two even numbers or two odd numbers, the answer is

_____.

When we add an even and odd number together, the answer is

_____.



Complete the following activities.

1.11 Add. Write E (even) or O (odd) on the line below each number. Did your answer follow the pattern? Write “yes” or “no.”

(yes, no) (yes, no)

$35 + 19 = \underline{\quad}$ $44 + 38 = \underline{\quad}$
 $\underline{\quad} + \underline{\quad} = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

$27 + 52 = \underline{\quad}$ $62 + 45 = \underline{\quad}$
 $\underline{\quad} + \underline{\quad} = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

1.12 Read the sentence. Write the answer in numbers.

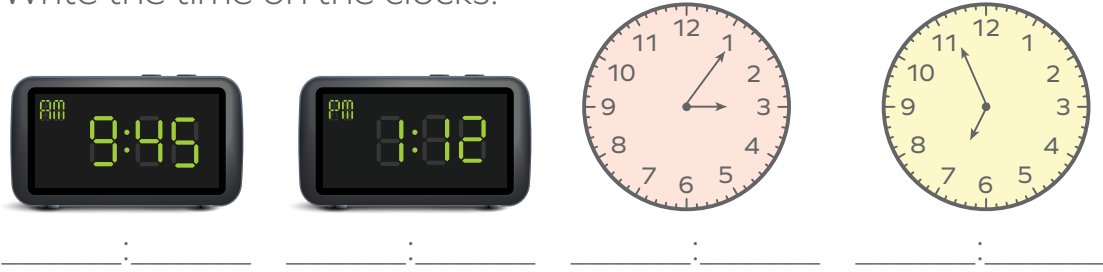
If we buy 3 dozen eggs, we have bought _____ eggs.

If we bake 4 dozen cookies, we have baked _____ cookies.

If there are a dozen inches in one foot, we can say there are _____ inches in two feet.

If there are a dozen hours from midnight to noon, we can say there are _____ hours in the morning.

1.13 Write the time on the clocks.



1.14 Write the answers.

A.M.	P.M.	second	dial
hour	digital	minute	

The first and second clocks above are _____ clocks.

The third and fourth clocks are _____ clocks.

The long hand on the clock is the _____ hand.

The short hand on the clock the _____ hand.

The hand that goes around once every minute is the _____ hand.

The time from midnight to noon is _____.

The time from noon to midnight is _____.

1.15 Write the standard measurements for time.

_____ seconds = 1 minute

_____ minutes = 1 hour

_____ hours = 1 day

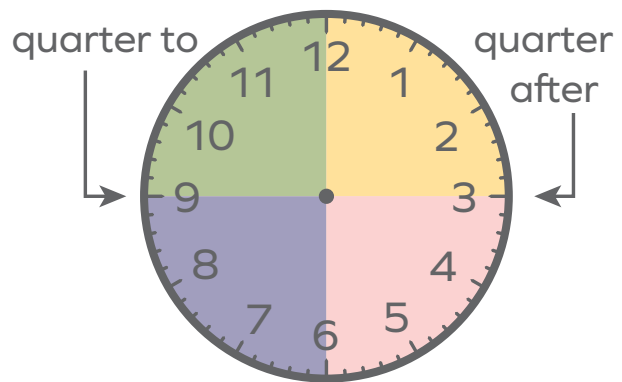
_____ days = 1 month

_____ months = 1 year

_____ days = 1 year

Quarter Hour

We may use the expressions “quarter after” or “quarter to” when we tell time. Look at the clock in the illustration.



The clock has been divided into four parts. Each part is one quarter of the whole. How many minutes in one quarter? _____

If we say it is “quarter after” 3, it is 3:15. If we say it is “quarter to” 4, it is 3:45.

If we say it is “quarter after” 6, it is _____.

If we say it is “quarter to” 9, it is _____.



For this Self Test, study what you have read and done. The Self Test will check what you remember.

SELF TEST 1

Complete these activities (each answer counts as 1 point, except where otherwise noted).

1.01 Add. (2 points each)

$4,368$	$5,447$	$2,853$	$3,435$
$+ 2,305$	$+ 2,396$	$+ 1,678$	$+ 2,791$
<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>

1.02 Write the multiples of ... (3 points each)

2. _____ , _____ , _____ , _____ , _____ ,

_____ , _____ , _____ , _____ , _____

3. _____ , _____ , _____ , _____ , _____ ,

_____ , _____ , _____ , _____ , _____

1.03 Add. Write E (even) or O (odd) on the line below each number. Write "yes" or "no" for pattern.

(yes, no)	(yes, no)
$31 + 27 =$ _____	$55 + 32 =$ _____
____ + ____ = _____	____ + ____ = _____

1.04 Read the sentence. Write the answer

When we add ...

two even numbers or two odd numbers, the answer is _____ .

an even and odd number together, the answer is _____ .

If we buy a dozen eggs, we have bought _____ eggs.

1.05 Write the answers.

A.M.
hour

P.M.
digital

second
minute

dial

The short hand on the clock is the _____ hand.

The hand that goes around once every minute is the _____ hand.

1.06 Write the standard measurements for time.

_____ seconds = 1 minute

_____ minutes = 1 hour

_____ hours = 1 day

_____ days = 1 month

_____ months = 1 year

_____ days = 1 year

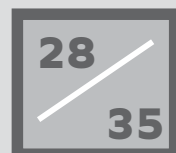


Teacher check:

Score _____

Initials _____

Date _____





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