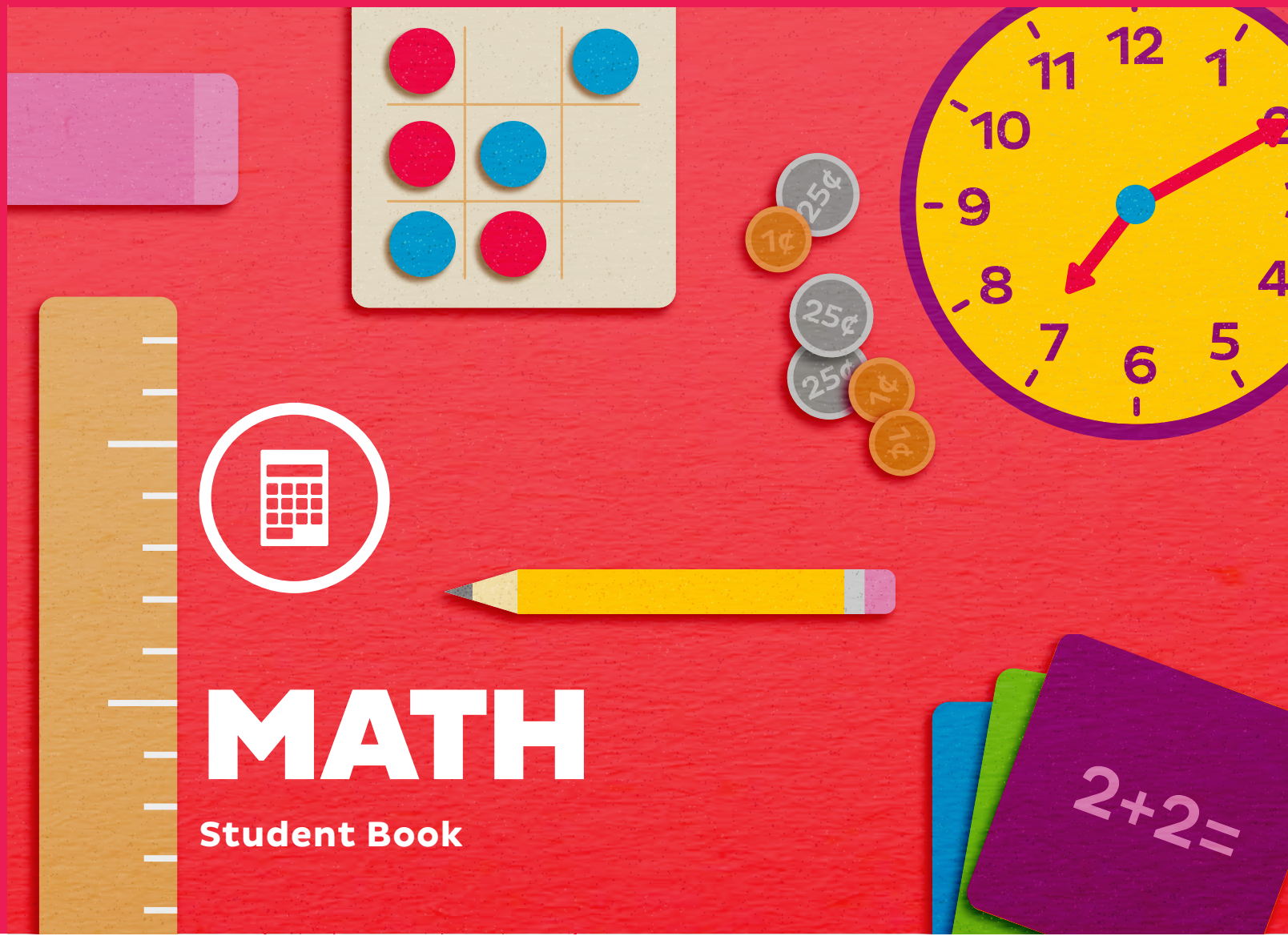
LIFEPAC®



2nd Grade

Alpha Omega PUBLICATIONS

NUMBERS AND WORDS TO 100
MATH 201

NUMBERS AND WORDS TO 100

Learn with our friends! They'll guide you through the LIFEPACs and keep the scores for you.

Objectives

Read these objectives. They will tell what you will be able to do when you have finished this LIFEPAC®.

1. I can read and write numbers to 100.
2. I know addition and subtraction facts to 18.
3. I can learn place value for ones and tens.
4. I can follow oral instructions.
5. I can add and subtract to tens' place.
6. I know operation symbols +, −, =, ≠, >, <.
7. I can write number sentences.
8. I can write fact families.
9. I can solve story problems in addition.
10. I can recognize patterns and tell what comes next.
11. I can recognize flat shapes.

1. NUMBERS AND WORDS TO 200

Count from 0 to 100.

1.1

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99
100									

1.2 **Write the numbers in number order.**

66 61 68 63 60 67 64 69 62 65

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

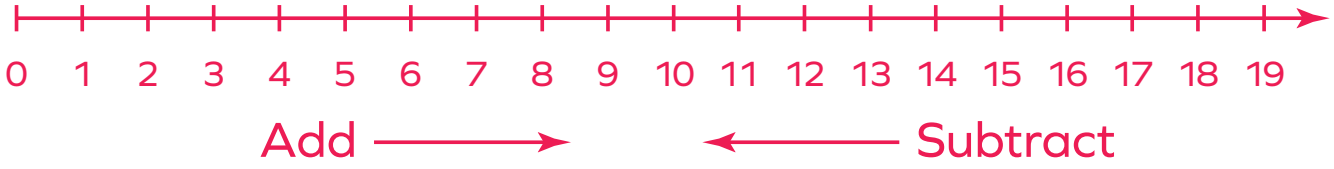
130 134 137 132 135 138 131

139 136 133

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

Use the number line to find the answer.



1.2

9 – 4 + 3 = _____

6 + 4 – 3 = _____

13 – 2 + 6 = _____

4 + 8 – 3 = _____

5 – 2 + 11 = _____

18 – 3 + 2 – 5 = _____

14 + 1 – 8 + 3 = _____

2 – 1 + 8 – 0 = _____

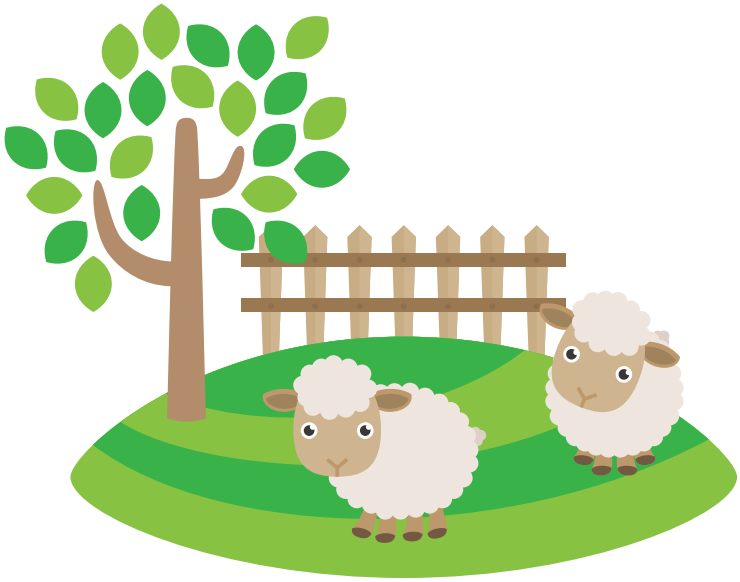
4 + 5 + 6 – 7 = _____

8 – 2 – 4 + 6 = _____

Seven plus four minus two equals _____ .

Nineteen minus six plus four equals _____ .

Four plus eight minus five equals _____ .



1.10 Count from 1 to 96. Draw dot-to-dot.

What do you think Willy Worm sees? _____

Willy Worm sees something,
He does not like a bit.
Willy Worm sees something,
He seems afraid of it!

Do you think he's hoping,
When you draw dot-to-dot,
That what he thinks is something,
You'll find is really not?

Finish coloring the picture.

Add or subtract. Find the circle that has the answer. Color it the same color as the box.

1.10

84 32 98 77 9 322 388 71 647

35 + 42	37 + 61	7 + 2 + 6	8 + 3 + 5	32 + 56 + 11
435 + 212	116 + 272	17 + 25	36 + 48	554 + 429
99	903	22	63	11	652
17 − 8	12 − 6	34 − 2	79 − 8	83 − 20
15	42	6	16	983
45 − 23	63 − 52	974 − 71	684 − 32	429 − 107

Before you take the Self Test, study what you have read and done. The Self Test will check what you remember.

1. TIME

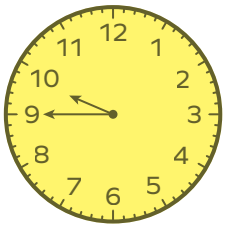
Write the time.

1.1

_____ : _____

_____ : _____

_____ : _____

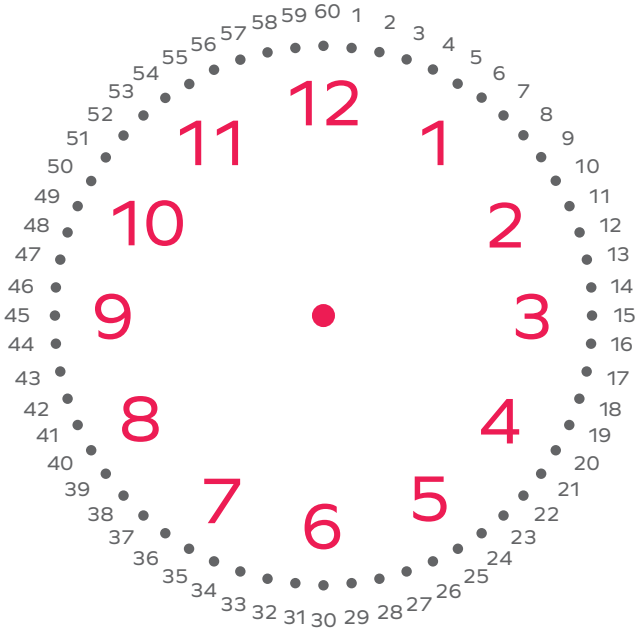


_____ : _____

1.2 **Write the answers.**

Point to the big 1 on the clock. Count the numbers around the circle. What number did you count to?

_____



How many hours on the clock?

_____

Draw dot-to-dot to finish the face of the clock. Each dot means 1 minute.

How many dots around the clock? _____

How many minutes on the clock? _____

| Use for Activities 1.2–1.4

SELF TEST 1

Each answer = 1 point, except where otherwise noted

1.01 **Write the missing number in the sequence.**

72, _____ , 74

259, 258, _____

412, 411, _____

930, _____ , 932

1.02 **Write the answer.**

There are about 70 pennies in a pile.
Would you count them by 2's, 5's, or 10's? _____

Why? _____

_____

1.03 **Write the answer.**

2 + 5 – 4 + 3 = _____

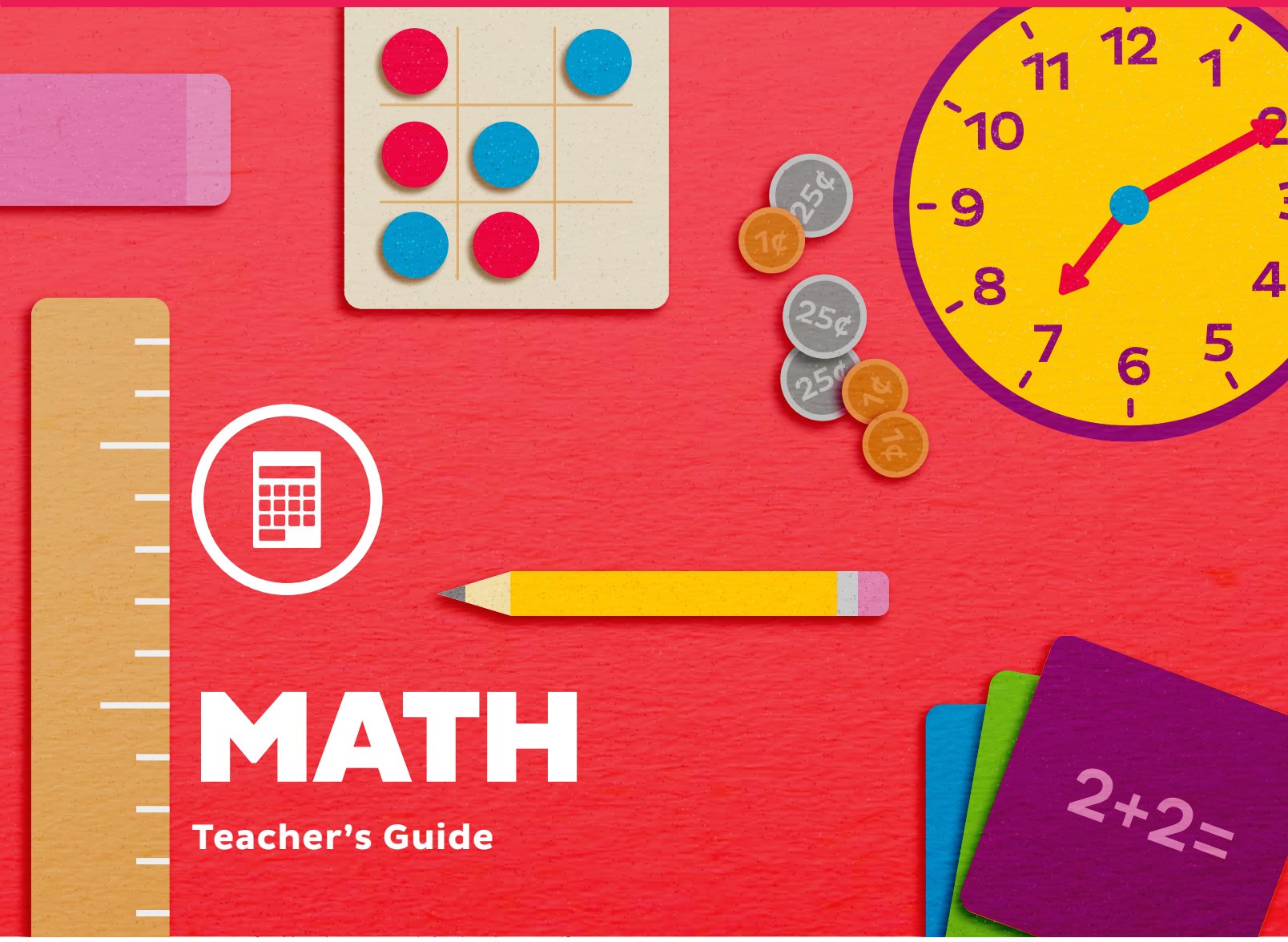
8 – 6 – 1 + 9 = _____

7 + 2 – 6 – 1 = _____

1.04 **Write the facts.**

6, 9, 15

LIFEPAC®



2nd Grade

Alpha Omega PUBLICATIONS

MATH 200

Teacher's Guide

INSTRUCTIONS FOR MATH

The LIFEPAC curriculum for grades two through twelve is structured so that the daily instructional material is written directly into the LIFEPACs. However, because of the variety of reading abilities at this grade level, the second grade mathematics Teacher's Guide contains additional instructional material to help the teacher prepare and present each lesson effectively. As the year progresses, students should be encouraged to read and follow the instructional material as presented in the LIFEPACs to develop independent study habits. The teacher should introduce the LIFEPAC to the student, set a required completion schedule, complete teacher checks, be available for questions regarding both content and procedures, administer and grade tests, and develop additional learning activities as desired. Teachers working with several students may schedule their time so that students are assigned to a quiet work activity when it is necessary to spend instructional time with one particular student.

The remainder of the Teacher's Guide includes the following teacher aids:

1) Introduction of Skills
2) Additional Activities

For each unit:

3) Materials Needed
4) Objectives
5) Teacher Instruction
6) Answer Keys
7) Alternate Tests

After the last unit:

8) Math Terms Glossary
9) Conversion Charts

The Introduction of Skills is a more detailed overview of skills than that presented in the *Scope and Sequence*. The Mathematics Terms includes a glossary of mathematics terms and a table of measurements. The Teacher Instruction Pages contain guidelines for teaching each lesson. Additional learning activities provide opportunities for problem solving, encourage the student's interest in learning, and may be used as a reward for good study habits.

Mathematics is a subject that requires skill mastery. But skill mastery needs to be applied toward active student involvement. The Teacher Instruction Pages list the required or suggested materials used in the LIFEPAC lessons. These materials include items generally available in the school or home. Pencils, paper, crayons, scissors, paste and/or glue stick are materials used on a regular basis. Construction paper, beads, buttons, and beans can be used for counting, sets, grouping, fractions, and patterning. Measurements require measuring cups, rulers, and empty containers. Boxes and similar items help in the study of solid shapes.

Any workbook assignment that can be supported by a real-world experience will enhance the student's ability for problem solving. There is an infinite challenge for the teacher to provide a meaningful environment for the study of mathematics. It is a subject that requires constant assessment of student progress. Do not leave the study of mathematics in the classroom.

MATH 200 INTRODUCTION OF SKILLS

Introduction of Skills is a quick reference guide for the teacher who may be looking for a rule or explanation that applies to a particular skill or to find where or when certain skills are introduced in the LIFEPACs. The first number after the skill identifies the LIFEPAC, and the second number identifies the section.

CONCEPT	LIFEPAC	SECTION
Addition		
facts to 18	201	1
1-digit number added to 10's n/c*	201	2
2 numbers 2-digits n/c	201	2
3 numbers 1-digit	201	4
3 numbers 2-digits n/c	201	4
1-digit number added to 10's w/c*	203	2
2 numbers 2-digits w/c	203	2
2 numbers 3-digits n/c	204	2
2 numbers 3-digits w/c 1's or 10's place	204 207	5 4
2 numbers 3-digits w/c 1's and 10's place	208	4
3 numbers 2-digits w/c	209	1
3 numbers 3-digits n/c	210	1
checking answers	202	3
no carry boxes	210	3
Directions		
north, south, east, west	208	4
Even and odd		
numbers	202	1
rules to add and subtract	209	5
Expanding numbers		
(see place value)		
Families of facts		
addition and subtraction	201	4
Fractions		
part of an object or set	202	4
addition	205	3
subtraction	206	4
writing in words	207	1
Graphs (Charts)		
gathering and posting data	205	1

CONCEPT	LIFEPAC	SECTION
Measurements		
dozen	205	5
linear		
inch	203	2
one-half inch	203	2
one-quarter inch	209	2
(square inches)	209	1
feet, yards	204	3
perimeter, area	206 209	3 1
length, width	208	3
temperature (Fahrenheit)	205	3
time		
calendar: days, weeks, months, years	204	5
to hour, half-hour, five minutes	202	2
to minute	206	1
A.M., P.M.	203	4
digital clock	210	3
volume: cups, pints, quarts, gallons	208	5
weight: ounces, pounds	206	1
Money		
add and subtract	208	4
pennies, dimes, nickels	202	4
dollars	203	3
dollar sign and decimal point	203	3
quarters	204	2
making change	204	5
Number line		
add or subtract to 18	203	1
Number order		
to 100	201	1
to 200	202	1
to 999	204	1
to 1,000	210	1

*n/c = no carrying *w/c = with carrying

TEACHER NOTES

MATERIALS NEEDED FOR LIFEPAC

Required

- Cards (3 inches by 5 inches) printed with number symbols *0* through *9* and number words *zero* through *nineteen*, also *twenty*, *thirty*, *forty*, and so on through *one hundred*. Several sets would be useful. (Cereal boxes are an excellent source of cardstock.)
- Cards with operation symbols: plus (+), minus (–), equal (=), not equal (≠), greater than (>), less than (<).
- Fact cards for addition and subtraction through *18*
- Counters for *ones* and *tens*—these may be cardstock strips (2 inches by 5 inches); one color for *ones*, another color for *tens*. (Popsicle sticks also work well as counters.)
- Objects for counting—beads, beans, buttons, bread wrapper twists, etc.
- Crayons, construction paper, scissors

Objectives

1. I can read and write numbers to 100.
2. I know addition and subtraction facts to 18.
3. I can learn place value for ones and tens.
4. I can follow oral instruction.
5. I can add and subtract to tens' place.
6. I know operation symbols +, −, =, ≠, >, <.
7. I can write number sentences.
8. I can write fact families.
9. I can solve story problems in addition.
10. I can recognize patterns and tell what comes next.
11. I can recognize flat shapes.

TEACHER NOTES

Section 1 – Number Symbols and Words to 100

1. Discuss *Objectives*.
2. Activities 1.1 through 1.6 – Have the students practice with cards, reading and putting number symbols and words in number order (1 through 19). Complete activities 1.1 through 1.6.
3. Activity 1.7 – Introduce addition fact cards through *18*. Set aside facts that the students have not mastered and practice several times a week.

ANSWER KEYS

SECTION 1

1.1
0 1 2 3 4 5 6
7 8 9 10

1.2
zero one two three
four five six seven
eight nine ten

1.3
4 3 6 5
0 9 2 7
10 8 1

1.4
11 12 13 14 15
16 17 18 19 20

1.5
eleven twelve thirteen fourteen
fifteen sixteen seventeen eighteen
nineteen twenty

1.6
b c
t f
m s
r g
d o
e p
q k
n a
l i
h j

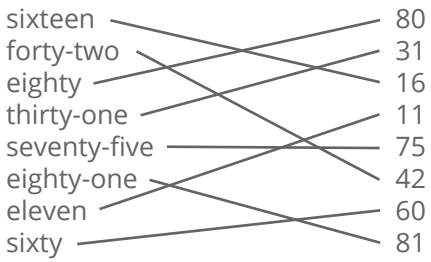
1.7
9 16 11 9 5 13 7 5 10
1 8 4 11 14 6 8 10 7
13 9 7 12 11 15 14 7 3
10 13 10 16 10 9 6 14 10
4 11 14 17 11 2 2 15 12
8 12 7 6 10 15 7 10 8
13 16 11 3 6 11 9 18 8
8 8 11 5 15 3 4 13 9
12 9 4 12 5 7 6 9 17
8 5 9 12 12 14 6 13 10

1.8
10 20 30 40 50
60 70 80 90 100

1.9
ten twenty thirty forty
fifty sixty seventy eighty
ninety one hundred

1.10
16
31
67
85
49
11
70
93
forty-five
sixty
seventy-nine
thirteen
eighty-one
thirty-six
fifty-four
one hundred

SELF TEST 1

1.01


1.02
seventeen
twenty-four
eight
thirty-seven
sixty-five
nineteen
fifty-three
twenty

1.03
9 11 17 7 7 10
10 15 7 10 11 7
9 7 8 14 12 6

SECTION 3

3.1

15	85	12
22	10	99
74	19	49
4	62	36

3.2

23	13	100
52	27	64
90	52	20
32	40	77

3.3

79	34	16
44	99	49
28	4	22
20	82	91

3.4

thirteen
twenty-one
sixty-two
seventy-nine
ten
fifty-two
seventy
forty

3.5

forty-five
eighty-two
thirteen
eight
sixty-seven
forty
ninety-four
seventeen

3.6

twenty
forty-seven
ninety-one
sixty-eight
ten
seventy-four
thirty-six
ninety-nine

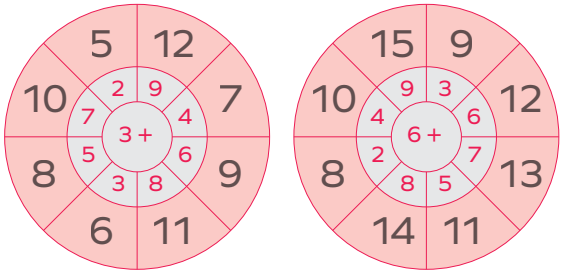
3.7

+	−
=	−
−	+
−	=
+/−	+
=	=
+	−
−	+
=	=
+	−

3.8

=	≠
≠	=
=	≠
≠	=
≠	≠
≠	≠
=	=
≠	≠

3.9



3.10

>	<
<	>
>	>
>	>
>	<
<	<
>	>
>	>

3.11

13, 14, 16, 17, 18, 20
38, 39, 40, 42, 43, 44
74, 76, 77, 79, 80, 81

3.12

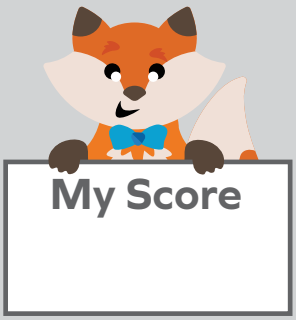
6 + 3 = 9
8 − 4 ≠ 3
12 > 11
54 < 56
13 − 7 = 6
4 > 0
6 + 2 ≠ 7
81 < 95
3 + 5 > 4 + 2
26 − 4 < 19 + 8

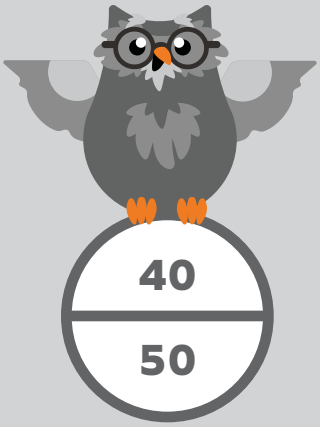
MATH 201

ALTERNATE LIFEPAC TEST

Name _____

Date _____





Each answer = 1 point, except where otherwise noted

1. Match.

thirty-six	▶	◀	13
sixty-three	▶	◀	33
sixty-six	▶	◀	63
thirteen	▶	◀	66
thirty-three	▶	◀	36

2. Write in words.

11 _____

7 _____

56 _____

30 _____

82 _____

3. **Write addition and subtraction facts.**

7	8	9	5	4
+ 3	+ 4	+ 0	+ 6	+ 3
15	7	9	13	11
− 8	− 0	− 4	− 5	− 8

4. **Circle the tens' place.**

46 13 84

5. **Write what comes next.**

5, 4, 3, _____

6. **Add or subtract.**

32	41	4 2	43 20	75	57
+ 7	+ 23	+ 3	+ 15	− 42	− 26

MATH TERMS GLOSSARY

acute angle ..... An angle that is less than a right angle or less than 90 degrees.

addend ..... A number to be added in an addition problem.

angle ..... The distance between two rays or line segments with a common endpoint.

associative property ..... No matter how numbers are grouped in addition and multiplication, the answer is always the same.

area ..... The measurement of a flat surface. $A = l \times w$ (rectangle); $A = \pi r^2$ (circle); $A = \frac{1}{2} b \times h$ (triangle).

average ..... The total of a group divided by the number in the group.

bar graph ..... A graph that uses bars to show data.

base (1) ..... The bottom part of a geometric figure on which the figure rests.

base (2) ..... The number used as a factor in exponential notation.

cancelling ..... Simplifying a problem in multiplication or division of fractions within the problem.

cardinal numbers ..... Numbers used for counting. 1, 2, 3, 4 ...

Celsius ..... Metric unit of measurement for temperature. Freezing, 0° C. Boiling, 100° C.

chart ..... An arrangement of data in a logical order.

circle ..... A continuous closed line always the same distance from a center point.

circle graph ..... A circular graph that always represents the whole of the data.

circumference ..... The distance around (perimeter) a circle. $C = 2\pi r$ or $C = \pi d$

common denominator ..... Fractions must have the same or common denominator to be added or subtracted.

compass ..... An instrument having two hinged legs used for drawing circles, curved lines, and measuring distances.

composite number ..... A number that can be divided by 1, by itself, and other numbers.