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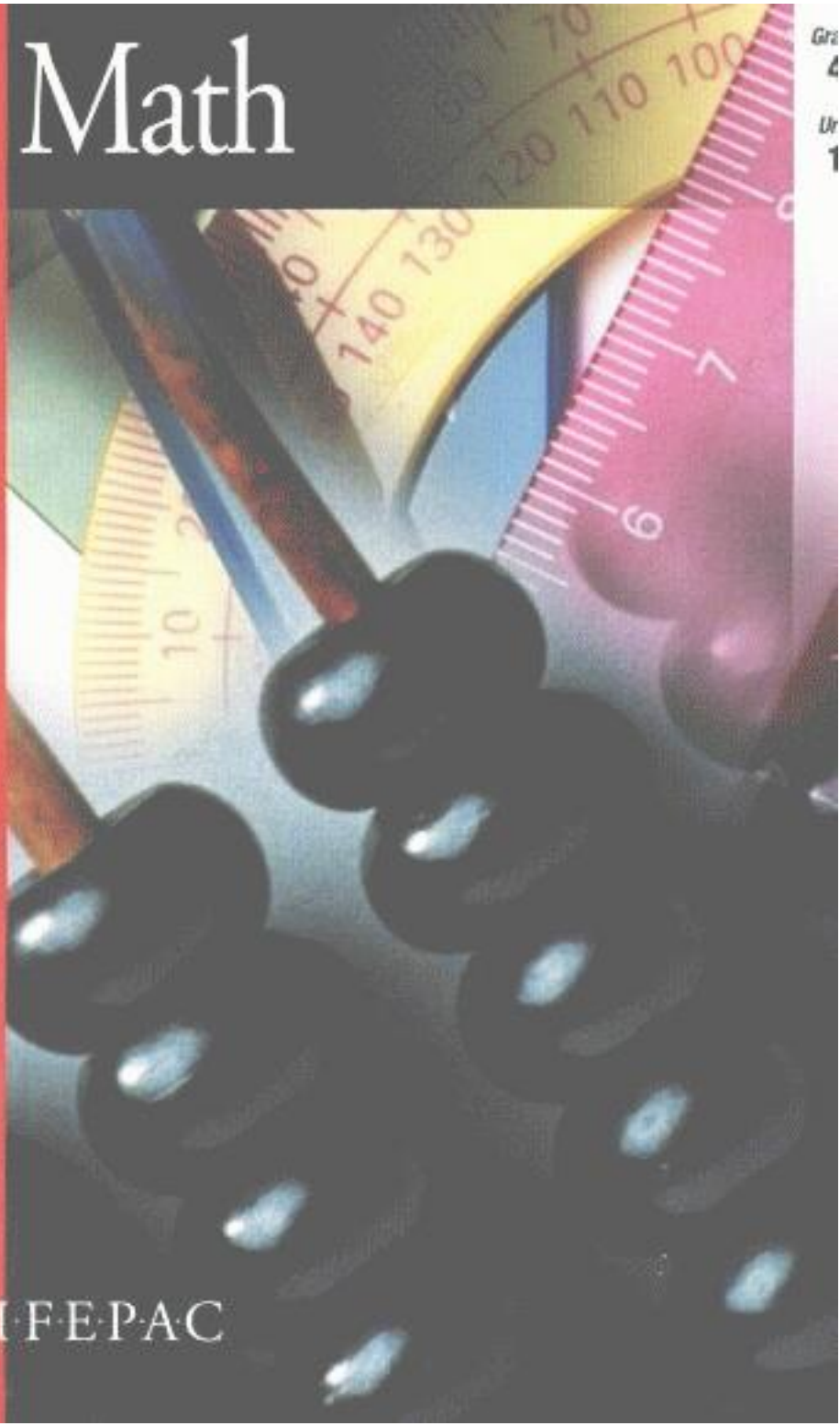
Math



LIFEPAC

MATHEMATICS 401

CONTENTS

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I. PART ONE

Learn Box

I know digits and place value to 1,000.
I remember addition and subtraction.

There are 26 letters in the alphabet, but only 10 digits to our number system.

The **digits** are **0, 1, 2, 3, 4, 5, 6, 7, 8, 9.**

Digits mean the same thing to mathematics as the letters of the alphabet mean to reading. Letters can be arranged to form words and digits can be arranged to form numbers.

Digits have value because of their place in the number.

Think of all the numbers you can write using 10 digits.

1.1 Write a number using 3 as the first digit, 4 as the second digit, and 7 as the last digit. _____

What position is the 3 in?_____ 4?_____ 7?_____

Write the number in words. _____

The digit **zero** has no value. We call it a **place holder**.

1.2 Using the number you have written in 1.1, put a zero between the digits 3 and 4. _____

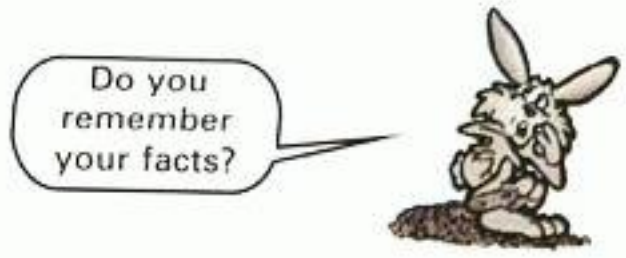
What position is the 3 in?_____ 0?_____ 4?_____ 7?_____

Write the number in words. _____

Numbers that have more than one digit are called **multi-digit** numbers.

1.3 Write a multi-digit number with 8 in the thousands' place, 4 in the ones' place, 7 in the tens' place, and 0 in the hundreds' place. _____

1.4 Write the answer to the facts.



3 + 3 =	3 + 9 =	8 + 5 =	4 + 9 =	3 + 6 =	6 + 9 =	8 + 0 =	7 + 6 =	9 + 5 =
4 + 6 =	8 + 4 =	6 + 0 =	6 + 5 =	8 + 7 =	9 + 9 =	7 + 7 =	4 + 7 =	6 + 6 =
5 + 0 =	5 + 7 =	9 + 0 =	5 + 5 =	7 + 9 =	8 + 8 =	7 + 0 =	6 + 8 =	9 + 8 =

6 − 3 =	12 − 9 =	13 − 8 =	9 − 3 =	15 − 9 =	13 − 9 =	8 − 8 =	13 − 6 =	14 − 5 =
5 − 0 =	12 − 7 =	9 − 9 =	10 − 5 =	16 − 9 =	7 − 0 =	16 − 8 =	14 − 6 =	17 − 9 =
3 − 2 =	3 − 0 =	8 − 4 =	1 − 1 =	10 − 8 =	9 − 4 =	10 − 9 =	7 − 5 =	10 − 3 =

You should know all of your addition and subtraction facts by now.

The numbers that we add have special names.

24	addend	In addition, the numbers that are
35	addend	added are named **addends**, and the
+ 64	addend	answer is named the **sum**.
123	sum	

Find the sum of these addends.

1.5 a. 576 + 247 b. 239 + 506 c. 735 + 657 = _____ d. 368 + 754 = _____

1.6 a. 672 + 391 b. 538 + 295 c. 663 + 305 = _____ d. 593 + 278 = _____

1.7 a. 73 + 59 + 42 b. 20 + 46 + 73 c. 56 + 82 + 40 = _____ d. 39 + 82 + 16 = _____

1.8 a. 85 + 26 + 42 b. 64 + 20 + 17 c. 56 + 23 + 44 = _____ d. 37 + 41 + 65 = _____

The numbers that we subtract have special names.

296	minuend
− 147	subtrahend
149	difference

In subtraction, the number that we begin with is named the **minuend**, the number being subtracted is named the **subtrahend,** and the answer is the **difference**.

Find the difference of the minuend and subtrahend.

1.9 a. 635 − 238 b. 421 − 135 c. 624 − 362 = _____ d. 864 − 576 = _____

1.10 a. 645 − 284 b. 588 − 275 c. 956 − 763 = _____ d. 525 − 184 = _____

1.11 a. 946 − 308 b. 406 − 219 c. 307 − 243 = _____ d. 754 − 647 = _____

1.12 a. 763 − 574 b. 839 − 472 c. 931 − 765 = _____ d. 468 − 321 = _____

When we count we use the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.
When we have used all of the digits once, we start over again and add a zero.

ones	tens	hundreds	thousands
1	10	100	1,000
1-digit number	2-digit number	3-digit number	4-digit number

1.13 Write the number that comes after...

0 _____	9 _____	99 _____	999 _____
5 _____	35 _____	297 _____	1,392 _____
7 _____	84 _____	599 _____	4,586 _____

1.14 Write the number that comes before...

_____ 4	_____ 60	_____ 729	_____ 5,643
_____ 8	_____ 14	_____ 400	_____ 8,451
_____ 5	_____ 56	_____ 932	_____ 9,643

1.15 Write the next numbers in order. Remember commas for thousands.

7, _____, _____, _____, _____, _____, _____

48, _____, _____, _____, _____, _____, _____

392, _____, _____, _____, _____, _____, _____

6,457, _____, _____, _____, _____, _____, _____

1.16 Write six facts with the answer of 13.

+ ___ 13	+ ___ 13	+ ___ 13	+ ___ 13	+ ___ 13	+ ___ 13

Digits have value because of their place in the number.

We write 'how many' and then we show the value.

		thousands		hundreds		tens		ones
8,635	=	8	+	6	+	3	+	5
	=	8,000	+	600	+	30	+	5

1.17 Write 'how many' for each number and then tell the value of the digit (expand).

		thousands		hundreds		tens		ones
9,402	=	_____	+	_____	+	_____	+	_____
	=	_____	+	_____	+	_____	+	_____

		thousands		hundreds		tens		ones
3,721	=	_____	+	_____	+	_____	+	_____
	=	_____	+	_____	+	_____	+	_____

		thousands		hundreds		tens		ones
6,118	=	_____	+	_____	+	_____	+	_____
	=	_____	+	_____	+	_____	+	_____

1.18 Do you remember? Tell how many.

1 day = _____ hours 1 hour = _____ minutes

60 minutes = _____ hours 24 hours = _____ days

1.19 Write six facts with the answer of 5.

$\frac{\_}{5}$ $\frac{\_}{5}$ $\frac{\_}{5}$ $\frac{\_}{5}$ $\frac{\_}{5}$ $\frac{\_}{5}$

SELF TEST 1

(each answer, 1 point)

1.01 List all of the digits. _____

1.02 Write a multi-digit number using the digits 5, 8, 6, and 3. _____

1.03 What is the *place* of the digit...

a. 4 in the number 485? _____

b. 7 in the number 703? _____

c. 6 in the number 2,596? _____

d. 8 in the number 8,905? _____

1.04 What is the *value* of the digit...

a. 6 in the number 632? _____

b. 3 in the number 839? _____

c. 2 in the number 7,512? _____

d. 4 in the number 4,135? _____

e. 0 in the number 5,046? _____

1.05 What is the purpose of 0 in a number? _____

1.06 Write the digit 1 in the tens' place, 6 in the ones' place, 8 in the thousands' place, and 2 in the hundreds' place. _____

1.07 Write the number that comes after ...

76 _____ 549 _____ 999 _____

1.08 Write the number that comes before ...

90 _____ 800 _____ 703 _____

SELF TEST 1 (cont.)

1.09 Write the next numbers in order (3 points each line).

357, _____, _____, _____, _____, _____, _____

4,638, _____, _____, _____, _____, _____, _____

1.010 Add. $\begin{array}{r} 496 \\ +\ 238 \\ \hline \end{array}$ (1 point)

1.011 Subtract. $\begin{array}{r} 832 \\ -\ 189 \\ \hline \end{array}$ (1 point)

1.012 In problems 1.010 and 1.011, what number is... (each answer, 1 point)

a. an addend? _____ b. the difference? _____

c. the subtrahend? _____ d. the minuend? _____

e. the sum? _____

1.013 Write 'how many' for each number and then tell the value of the digit (each line, 1 point).

		thousands		hundreds		tens		ones
3,702	=	_____	+	_____	+	_____	+	_____
	=	_____	+	_____	+	_____	+	_____

1.014 Tell how many. (each answer, 1 point)

1 day = _____ hours 1 hour = _____ minutes

60 minutes = _____ hours 24 hours = _____ days

1.015 Add. 703 + 459 = (1 point)

1.016 Subtract. 550 – 238 = (1 point)

My score _____

Teacher check _____

II. PART TWO

Learn Box

I can learn multiplication facts for 1 through 5.
I can write a family of facts.
I can read a dial clock.

2.1 Fill in the missing numbers on the number chart from 0 to 100.

0		2		4	5		7		9
	11	12	13		15	16		18	
20	21			24		26	27		29
30		32	33		35		37	38	
	41		43	44		46		48	49
	51	52			55	56	57		59
60		62		64	65		67	68	
70	71		73	74		76		78	
	81	82	83		85		87		89
90		92		94	95	96		98	
100									

2.2 Count by 2's. Circle the number in the box.

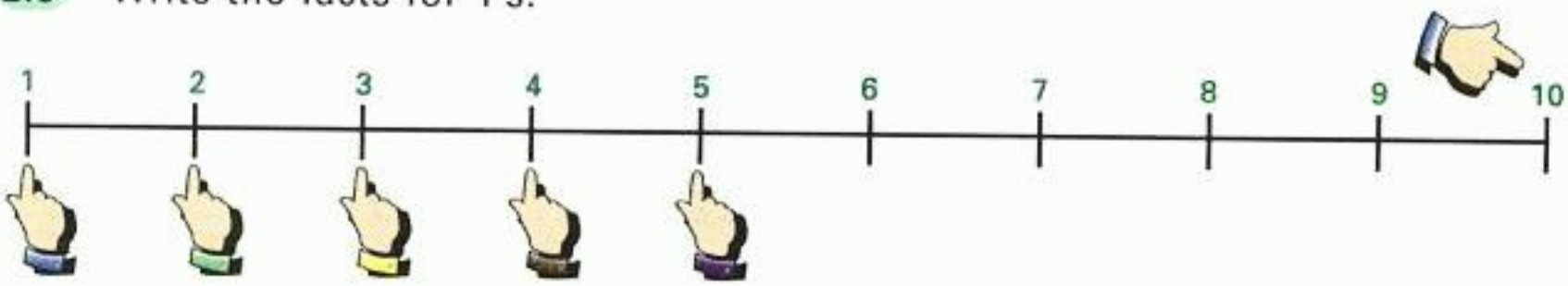
2.3 Count by 5's. Color the number box green.

2.4 Count by 10's. Write the numbers.

____, ____, ____, ____, ____, ____, ____, ____, ____, ____

We can learn the **multiplication facts** for 1, 2, 3, 4, and 5.
The symbol for multiplication is **x**.
The word we use to describe multiplication is **times**.

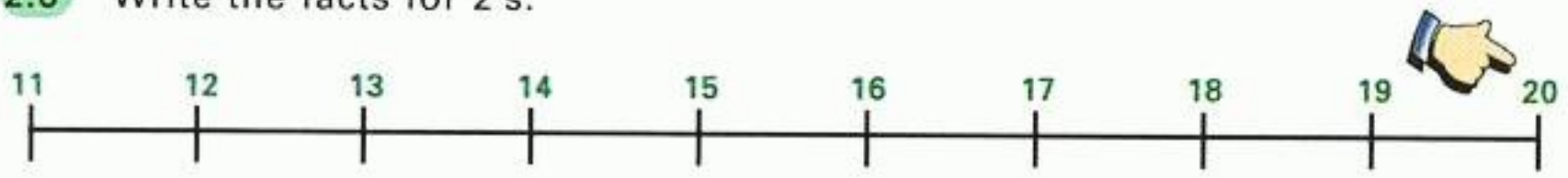
2.5 Write the facts for 1's.



a. 1 x 1 = ____
b. 2 x 1 = ____
c. 3 x 1 = ____
d. 4 x 1 = ____
e. 5 x 1 = ____
f. 6 x 1 = ____
g. 7 x 1 = ____
h. 8 x 1 = ____
i. 9 x 1 = ____
j. 10 x 1 = ____

Place your finger at the 1.
We say one 1 is equal to 1.
Add 1 more.
We say two 1's are equal to 2.
Continue to add 1 more as you move your finger along the number line, until you find the answer to 10 times 1.
Write the numbers on the lines.

2.6 Write the facts for 2's.



a. 1 x 2 = ____
b. 2 x 2 = ____
c. 3 x 2 = ____
d. 4 x 2 = ____
e. 5 x 2 = ____
f. 6 x 2 = ____
g. 7 x 2 = ____
h. 8 x 2 = ____
i. 9 x 2 = ____
j. 10 x 2 = ____

Place your finger at the 2.
We say one 2 is equal to 2.
Add 2 more.
We say two 2's are equal to 4.
Continue to add 2 more as you move your finger along the number line, until you find the answer to 10 times 2.
Write the numbers on the lines.

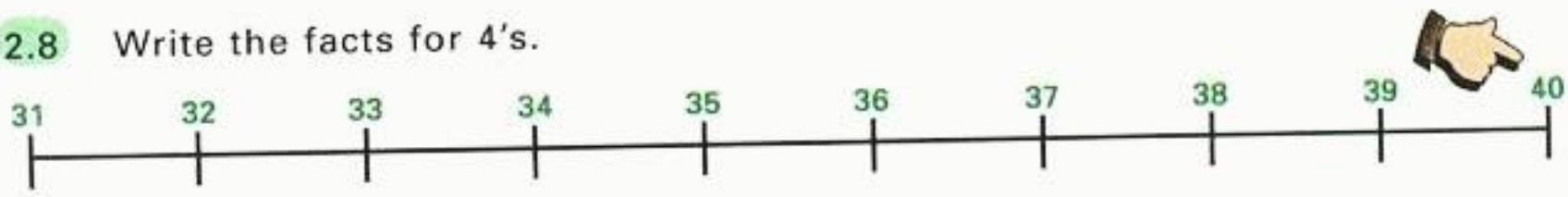
Try to learn the facts for 1 through 5 before you finish LIFEPAC 401.

2.7 Write the facts for 3's.

a. 1 x 3 = ____
b. 2 x 3 = ____
c. 3 x 3 = ____
d. 4 x 3 = ____
e. 5 x 3 = ____
f. 6 x 3 = ____
g. 7 x 3 = ____
h. 8 x 3 = ____
i. 9 x 3 = ____
j. 10 x 3 = ____

Place your finger at the 3.
We say one 3 is equal to 3.
Add 3 more.
We say two 3's are equal to 6.
Continue to add 3 more as you move your finger along the number line, until you find the answer to 10 times 3.
Write the numbers on the lines.

2.8 Write the facts for 4's.



a. 1 x 4 = ____
b. 2 x 4 = ____
c. 3 x 4 = ____
d. 4 x 4 = ____
e. 5 x 4 = ____
f. 6 x 4 = ____
g. 7 x 4 = ____
h. 8 x 4 = ____
i. 9 x 4 = ____
j. 10 x 4 = ____

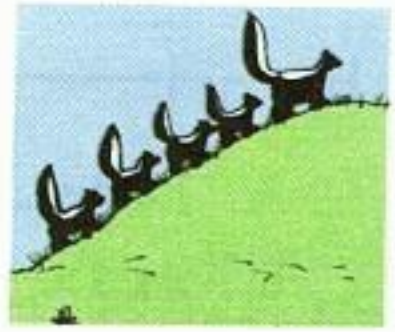
Place your finger at the 4.
We say one 4 is equal to 4.
Add 4 more.
We say two 4's are equal to 8.
Continue to add 4 more as you move your finger along the number line, until you find the answer to 10 times 4.
Write the numbers on the lines.

2.9 Write the facts for 5's.

a. 1 x 5 = ____
b. 2 x 5 = ____
c. 3 x 5 = ____
d. 4 x 5 = ____
e. 5 x 5 = ____
f. 6 x 5 = ____
g. 7 x 5 = ____
h. 8 x 5 = ____
i. 9 x 5 = ____
j. 10 x 5 = ____

Place your finger at the 5.
We say one 5 is equal to 5.
Add 5 more.
We say two 5's are equal to 10.
Continue to add 5 more as you move your finger along the number line, until you find the answer to 10 times 5
Write the numbers on the lines.

Addition facts are all of the one digit numbers with their sums.
Subtraction facts are related to addition facts.
Together they make a **family of facts**.
If we know one fact, we can say we know four facts.



7, 4, 11 $\quad 7 + 4 = 11 \quad 11 - 7 = 4 \quad 4 + 7 = 11 \quad 11 - 4 = 7$

2.10 Write the family of facts for these numbers.

8, 4, 12 _____ _____ _____ _____

3, 6, 9 _____ _____ _____ _____

15, 7, 8 _____ _____ _____ _____

5, 9, 4 _____ _____ _____ _____

2.11 Add and name the parts.

a. 16 addend _____ 45 _____

+ 13 addend _____ + 27 _____

29 sum _____ _____

b. 63 _____ 81 _____

+ 72 _____ + 96 _____

_____ _____

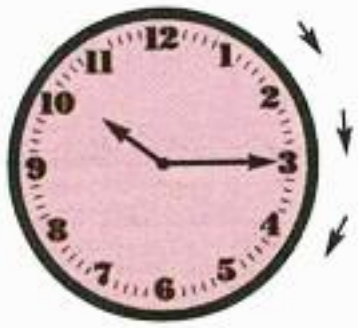
2.12 Do you remember? Tell how many.

1 yard = _____ inches 3 feet = _____ yard

36 inches = _____ yards 12 inches = _____ feet

1 foot = _____ inches 1 yard = _____ feet

The hands of the clock move in a clockwise direction.
The small hand tells the hour and the long hand tells the minute.
We look at the number that the hour hand is moving *away from* to tell the hour.



10:15

5:05

1:47

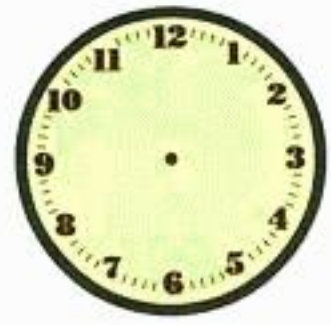
2.13 Write the correct time for each clock.

2.14 Draw the hands on the clock.

7:15

6:35

8:16



5:48

2.15 Fill in the blanks.

The hour hand moves around the clock _____ times each day.

A day begins at _____ and ends at _____.

There are _____ hours before noon and _____ hours after noon.

We use the letters AM and PM to help us tell time.

The time before noon is _____. The time after noon is _____.

SELF TEST 2

2.01 Count by 10's to 100. Write the numbers (this question 5 points).

_____, _____, _____, _____, _____, _____, _____, _____, _____, _____

2.02 Count by 5's to 25. Write the numbers (this question 5 points).

_____, _____, _____, _____, _____

2.03 Count by 2's. Start at 12 Count to 20 (this question 5 points).

_____, _____, _____, _____, _____

2.04 Write the answers to the facts (2 points each set).

a. (6 x 1 through 10 x 1)

6 x 1 = _____
7 x 1 = _____
8 x 1 = _____
9 x 1 = _____
10 x 1 = _____

b. (6 x 2 through 10 x 2)

6 x 2 = _____
7 x 2 = _____
8 x 2 = _____
9 x 2 = _____
10 x 2 = _____

c. (6 x 3 through 10 x 3)

6 x 3 = _____
7 x 3 = _____
8 x 3 = _____
9 x 3 = _____
10 x 3 = _____

d. (6 x 4 through 10 x 4)

6 x 4 = _____
7 x 4 = _____
8 x 4 = _____
9 x 4 = _____
10 x 4 = _____

e. (6 x 5 through 10 x 5)

6 x 5 = _____
7 x 5 = _____
8 x 5 = _____
9 x 5 = _____
10 x 5 = _____

2.05 Write the family of facts for these numbers. (each answer, 1 point)

8, 4, 12 _____ _____ _____ _____

2.06 Tell how many. (each answer, 1 point)

1 yard = _____ inches 3 feet = _____ yard

36 inches = _____ yards 12 inches = _____ feet

1 foot = _____ inches 1 yard = _____ feet

2.07 Draw the hands on the clock. (each answer, 1 point)

3:45

6:20

2:41

2.08 Fill in the blanks.

The hour hand moves around the clock _____ times each day. (1 point)

We use the letters AM and PM to help us tell time. (this question 1 point)

The time before noon is _____. The time after noon is _____.

32/40

My score _____

Teacher check _____

III. PART THREE

Learn Box

I can write number words through thousands.
I can recognize patterns.
I know cardinal and ordinal numbers.

With these words, we can write any number to thousands' place.

one	six	eleven	sixteen	twenty	seventy
two	seven	twelve	seventeen	thirty	eighty
three	eight	thirteen	eighteen	forty	ninety
four	nine	fourteen	nineteen	fifty	hundred
five	ten	fifteen		sixty	thousand

Remember these rules.

We use a hyphen to join the tens' numbers and ones' numbers.
We write a comma between the thousands' place and hundreds' place.
Never use the word 'and' when writing whole numbers.

4,285 is four thousand, two hundred eighty-five.

3.1 Write the number words.

a. 36 _____

b. 150 _____

c. 1,663 _____

d. 1,005 _____

e. 910 _____

f. 895 _____

3.2 Write a number word with...

a. six in the ones' place, five in the tens' place. _____

b. eight in the tens' place, zero in the ones' place, and four in the hundreds' place. _____

3.3 Match the number words and the number symb

a. _____ seven thousand, twenty-eight

b. _____ seven thousand, two hundred eight

c. _____ seven thousand, two hundred eighty-eight

d. _____ seven thousand, eight hundred twenty-eight

e. _____ seven thousand, eighty-eight

f. _____ two thousand, five hundred seventy

g. _____ two thousand, five hundred seven

h. _____ two thousand, five hundred seventy-seven

i. _____ two thousand, fifty-seven

j. _____ two thousand, seventy-seven

k. _____ nine thousand, nine

l. _____ nine thousand, nine hundred

m. _____ nine thousand, ninety

n. _____ nine thousand, ninety-nine

o. _____ nine thousand, nine hundred ninety-nine

1. 9,090
2. 2,577
3. 7,088
4. 9,009
5. 7,208
6. 9,999
7. 2,507
8. 7,828
9. 2,077
10. 9,099
11. 2,570
12. 7,288
13. 9,900
14. 2,057
15. 7,028

3.4 Subtract and name the parts.

a. 49 minuend _____

\- 15 subtrahend _____

34 difference _____

73 _____

\- 58 _____

_____

b. 864 _____

\- 483 _____

_____

781 _____

\- 396 _____

_____

Digits have their value from their place in the number.

3.5 Circle the number in which the underlined digit has the greatest value.

a. 7	75	57	407	753
b. 9	9	93	945	609
c. 5	305	405	500	5,094

3.6 Write the value of the underlined digit in each number.

a. 6	63 _____	36 _____	659 _____
b. 2	231 _____	2 _____	2,356 _____
c. 4	54 _____	3,467 _____	240 _____

3.7 Circle the correct answer.

As digits move to the (left, right) in a number, they increase in value.

3.8 Write the largest four digit number possible with the digit . . .

a. 4 in the thousands' place. _____

b. 6 in the hundreds' place. _____

c. 9 in the tens' place. _____

3.9 Write six different numbers in number order using the digits 5, 8, 3.

_____ _____ _____ _____ _____ _____

3.10 Write six different numbers in number order using the digits 4, 0, 8.

_____ _____ _____ _____ _____ _____

3.11 Write the numbers from 3.10 in which you did not need to use zero as a place holder.

_____ _____

Patterns help us to learn, to find answers, and to remember.
When we recognize a pattern, we can predict what will come next.
When we understand a pattern, we can give a correct answer.

3.12 Complete this pattern of digits.

0, 1, 2, 3, _____, _____, _____, _____, _____, _____

3.13 Complete this pattern of objects. Show what comes next.

The numbers or objects that develop the pattern are called the **sequence**.
Three dots mean that the sequence continues.
Sequences may be developed from many mathematics operations.

2, 4, 6, 8, 10, ___,... The next number in this number pattern or sequence is 12. The pattern in this sequence is add 2.

24, 20, 16, 12, ___,... The next number in this number pattern or sequence is 8.The pattern in this sequence is subtract 4.

5, 8, 11, 14, 17, ___, ... The next number in this number pattern or sequence is 20. The pattern in this sequence is add 3.

3.14 Find the missing numbers in each sequence.

a. 3, 6, 9 ,12, ___,... The pattern is _____.

b. 35, 30, 25, 20, ___,... The pattern is _____.

c. 27, 24, ___, 18, 15,... The pattern is _____.

d. 10, 20, 30, ___, 50,... The pattern is _____.

e. 9, ___, 27, 36, 45,... The pattern is _____.

f. 5, 10, 20, ___, 80,... The pattern is _____.

We use **cardinal** numbers for counting. We use **ordinal** numbers to tell order.

cardinal numbers	ordinal numbers
one, two, three, ...	first, second, third, ...

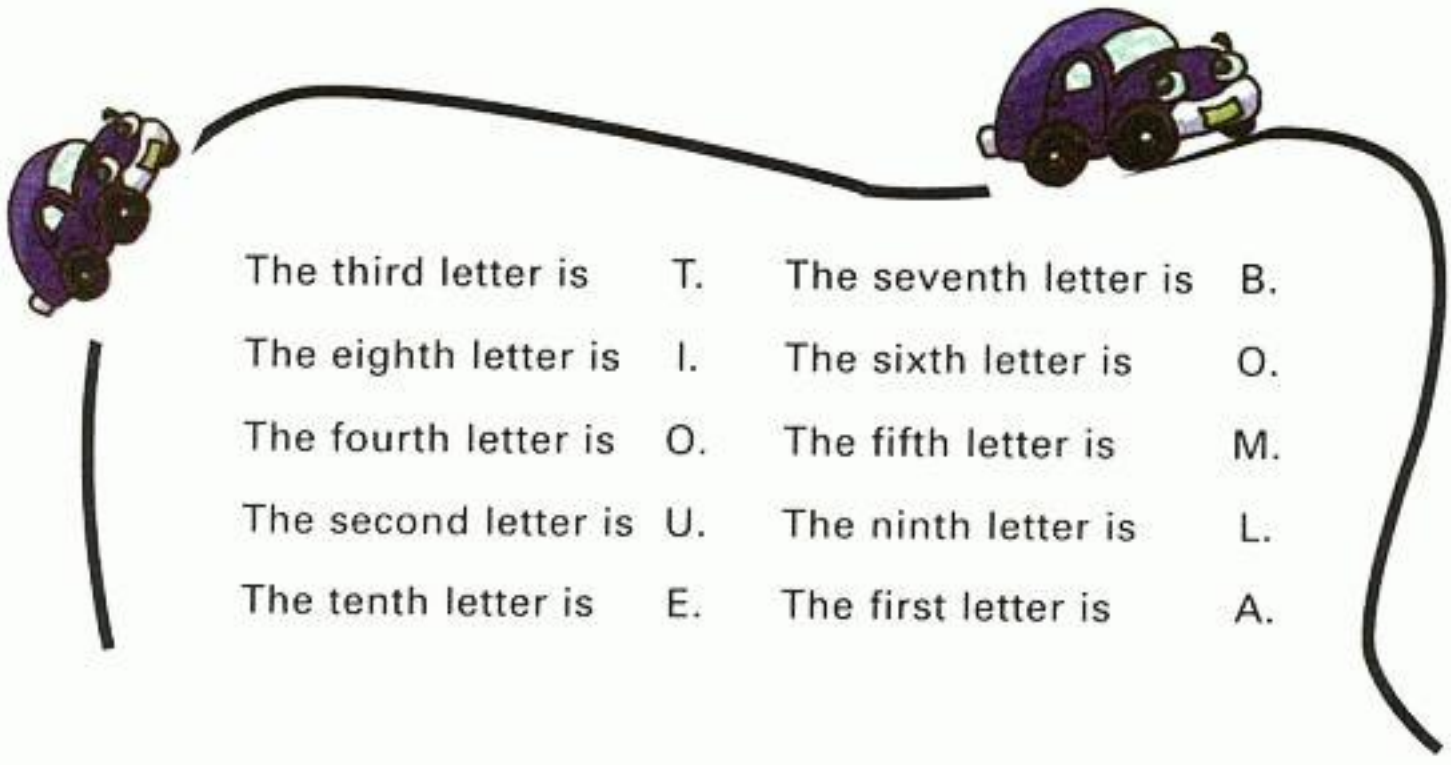
3.15 Write four more number words in each sequence.

a. seven, eight, nine, _____, _____, _____, _____, ...

b. seventh, eighth, ninth, _____, _____, _____, _____, ...

3.16 Write the letters in order.

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____



The third letter is	T.	The seventh letter is	B.
The eighth letter is	I.	The sixth letter is	O.
The fourth letter is	O.	The fifth letter is	M.
The second letter is	U.	The ninth letter is	L.
The tenth letter is	E.	The first letter is	A.

3.17 Find the difference.

a. $\begin{array}{r} 320 \\ -\ 195 \\ \hline \end{array}$ b. $\begin{array}{r} 703 \\ -\ 428 \\ \hline \end{array}$ c. $\begin{array}{r} 674 \\ -\ 362 \\ \hline \end{array}$ d. $\begin{array}{r} 854 \\ -\ 127 \\ \hline \end{array}$ e. $\begin{array}{r} 632 \\ -\ 176 \\ \hline \end{array}$

3.18 Write the number for each number word.

a. six hundred twenty-five _____

b. seven thousand, two hundred six _____

c. ninety-five _____

d. seven hundred forty _____

e. eight thousand _____

f. four thousand, ten _____

3.19 Find the sum.

a.

13	27	212	135	208
12	56	356	463	315
+ 18	+ 43	+ 715	+ 240	+ 512

b.

246	972	327	873	467
+ 385	+ 846	+ 564	+ 295	+ 872

We can learn to 'think' an addition problem. We do not need to 'write' each step.

$8 + 6 + 7 = 21$ We 'think' $8 + 6 = 14$, $14 + 7 = 21$.

3.20 Solve these problems by 'thinking' each step and then writing the answer.

a. $4 + 6 + 7 =$ _____ $9 + 9 + 4 =$ _____

b. $9 + 3 + 8 =$ _____ $3 + 8 + 6 =$ _____

c. $7 + 4 + 3 =$ _____ $2 + 9 + 4 =$ _____

SELF TEST 3

3.01 Write the number words. (each answer, 1 point)

a. 5,362 _____

b. 9,053 _____

3.02 Write a number word with... (each answer, 1 point)

a. eight in the ones' place, four in the tens' place. _____

b. zero in the tens' place, five in the ones' place, and seven in the hundreds' place. _____

3.03 Match the number words and the number symbols. (each answer, 1 point)

a. _____	four thousand, seven hundred sixty-two	1.	6,015
b. _____	four thousand, seven hundred two	2.	4,700
c. _____	four thousand, seven hundred	3.	6,025
d. _____	four thousand, seven hundred sixty	4.	4,702
e. _____	six thousand, five hundred	5.	6,005
f. _____	six thousand, fifteen	6.	6,500
g. _____	six thousand, twenty-five	7.	4,762
h. _____	six thousand, five	8.	4,760

3.04 Write six different numbers in number order using the digits 6, 2, 9. (each answer, 1 point)

_____ _____ _____ _____ _____ _____

3.05 Write the ordinal number word. (1 point) 84, 76, 39, 47

In this group of numbers, 39 is the _____ number.

3.06 What is the ... (each answer, 1 point)

a. next number in the sequence 24, 22, 20, 18, ... _____

b. pattern of the sequence? _____

3.07 Write the number for each number word. (each answer, 1 point)

a. two hundred three _____

b. eight thousand, sixty-four _____

3.08 Find the sum. (each answer, 1 point)

$$\begin{array}{r} 239 \\ +\ 562 \\ \hline \end{array} \qquad \begin{array}{r} 478 \\ +\ 657 \\ \hline \end{array} \qquad \begin{array}{r} 59 \\ 32 \\ +\ 61 \\ \hline \end{array} \qquad \begin{array}{r} 283 \\ 435 \\ 261 \\ +\ 527 \\ \hline \end{array}$$

3.09 Find the difference. (each answer, 1 point)

$$\begin{array}{r} 47 \\ -\ 28 \\ \hline \end{array} \qquad \begin{array}{r} 564 \\ -\ 329 \\ \hline \end{array} \qquad \begin{array}{r} 956 \\ -\ 359 \\ \hline \end{array}$$

24/30

My score _____

Teacher check _____

IV. PART FOUR

Learn Box

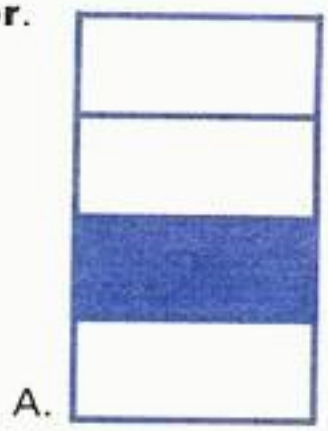
I want to read and write fractions.
I can learn about dollars and cents.

Fractions are numbers that stand for parts of things. They are made of two numbers separated by a line called a **fraction bar**. The top number is called the **numerator** and the bottom number is called the **denominator**.

fraction bar $\frac{1}{4}$ numerator / denominator

The denominator or bottom number represents the whole.

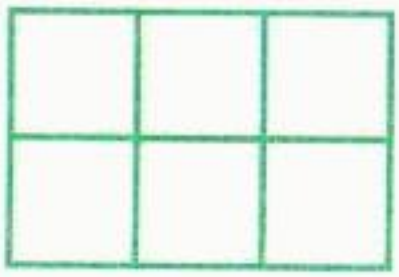
In Figure A, the whole is made up of 4 parts.
The denominator that describes Figure A is 4.



A.

The top number or numerator tells us how many parts of the whole that we are talking about.

Look at the shaded part of Figure A.
The numerator that expresses Figure A is 1.



B.

C.

4.1 How many parts make up the whole in Figure B? _____

4.2 Write the denominator that describes Figure B. _____

4.3 Shade four parts of Figure B.
Express the part that you have shaded as a fraction. _____

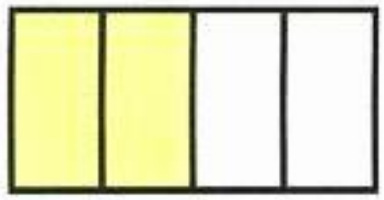
4.4 How many parts make up the whole of Figure C? _____

4.5 Write the denominator that describes Figure C. _____

4.6 Shade three parts of Figure C.
Write the part that you have shaded as a fraction. _____

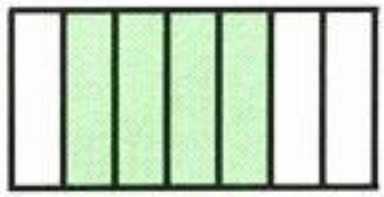
4.7 Write the fraction for the shaded part of each drawing.

a.

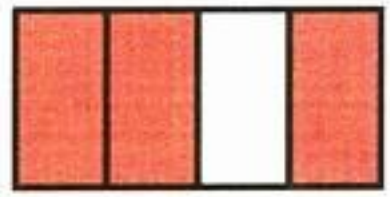


b.

c.



d.



When we say the name of a fraction, the numerator sounds like a cardinal number and the denominator sounds like an ordinal number.

$\frac{1}{3}$	one third	one-third		$\frac{4}{5}$	four fifths	four-fifths

4.8 Write the fractions for exercise 4.7 in words. Your spelling *must* be correct.

a. _____ b. _____

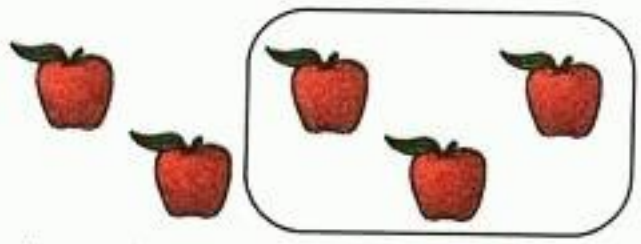
c. _____ d. _____

4.9 Match each fraction with its number word.

a. ____ $\frac{5}{6}$	f. ____ $\frac{3}{5}$	1. one-ninth	6. one-half
b. ____ $\frac{1}{2}$	g. ____ $\frac{2}{3}$	2. three-fourths	7. three-fifths
c. ____ $\frac{1}{9}$	h. ____ $\frac{4}{6}$	3. two-thirds	8. ten-twelfths
d. ____ $\frac{5}{7}$	i. ____ $\frac{10}{12}$	4. five-sixths	9. eight-tenths
e. ____ $\frac{8}{10}$	j. ____ $\frac{3}{4}$	5. five-sevenths	10. four-sixths

Fractions may be part of a whole or part of a set.

$\frac{2}{3}$ two-thirds of a burger



$\frac{3}{5}$ three-fifths of a set of apples

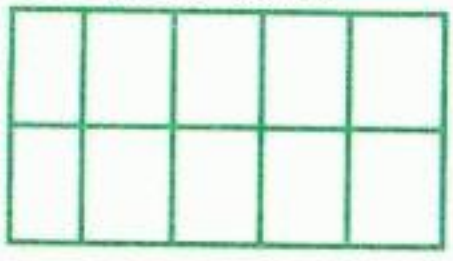
4.10 Draw a set of six balls. Circle 4 of the balls.

a. Express the balls that have been circled as a fraction. _____

b. Write the fraction in words. _____

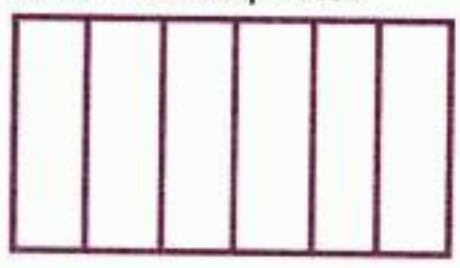
4.11 Color the parts. Write the fraction in numbers and in words.

a. Color four parts.



_____ _____

b. Color three parts.



_____ _____

4.12 Write the number word for each fraction. *Spell correctly.*

a. $\frac{2}{8}$ _____

b. $\frac{6}{10}$ _____

c. $\frac{2}{5}$ _____

d. $\frac{7}{9}$ _____

e. $\frac{4}{8}$ _____

f. $\frac{2}{9}$ _____

g. $\frac{8}{10}$ _____

h. $\frac{7}{14}$ _____

4.13 Write the missing numbers in the multiplication facts.

a.	9 x 1 = _____	7 x 1 = _____
b.	4 x 2 = _____	2 x 1 = _____
c.	3 x 1 = _____	4 x 1 = _____
d.	4 x 3 = _____	10 x 3 = _____
e.	1 x 1 = _____	8 x 1 = _____
f.	5 x 1 = _____	5 x 2 = _____
g.	9 x 3 = _____	10 x 2 = _____
h.	9 x 2 = _____	2 x 3 = _____
i.	8 x 5 = _____	4 x 4 = _____
j.	8 x 3 = _____	5 x 3 = _____
k.	7 x 5 = _____	1 x 2 = _____
l.	2 x 2 = _____	5 x 4 = _____
m.	10 x 1 = _____	4 x 5 = _____
n.	6 x 5 = _____	3 x 3 = _____
o.	7 x 3 = _____	10 x 4 = _____
p.	5 x 5 = _____	6 x 4 = _____
q.	1 x 3 = _____	2 x 4 = _____
r.	3 x 2 = _____	10 x 3 = _____
s.	9 x 5 = _____	3 x 4 = _____
t.	10 x 1 = _____	1 x 3 = _____
u.	9 x 4 = _____	2 x 5 = _____
v.	10 x 2 = _____	4 x 5 = _____
w.	1 x 4 = _____	10 x 2 = _____

4.14 Write a number fact for the answer.

x _____	x _____	x _____	x _____	x _____	x _____
8	15	24	16	27	40

We can show money in coins or in dollars. We use the cent sign (¢) or the dollar sign ($) with decimal point (.). We never use the signs together.

435¢ four hundred thirty-five cents $4.35 four dollars and thirty-five cents

4.15 Show two possible combinations of dollars and coins for each amount of money.

	dollars	half-dollars	quarters	dimes	nickels	pennies
a. $8.65						
b. 275¢						

4.16 Write the money in numbers.

a. three dollars and sixty-five cents _____

b. twenty-two dollars and four cents _____

c. one hundred thirty-two cents _____

d. nine dollars and seventy cents _____

4.17 Find the sum.

76	38	274	2,518	356
+ 49	+ 56	+ 389	+ 8,427	862
				+ 975

4.18 Find the difference.

86	85	739	860	703
− 15	− 36	− 543	− 299	− 465

Digits are the signs we use for numbers.
Operation signs tell us how the numbers relate to each other.
When we use a combination of numbers and operation signs we are writing a **number sentence**.

add + subtract – multiply x equal =

4.19 Write the answer to complete the number sentence.

a.

1 + 8 = _____	8 + 3 = _____	5 + 5 = _____
2 + 5 = _____	7 + 6 = _____	4 + 8 = _____
1 + 9 = _____	8 + 0 = _____	7 + 2 = _____
1 + 4 = _____	6 + 9 = _____	5 + 1 = _____
4 + 5 = _____	5 + 2 = _____	8 + 9 = _____
2 + 8 = _____	4 + 9 = _____	9 + 7 = _____

b.

5 – 4 = _____	15 – 9 = _____	6 – 1 = _____
9 – 5 = _____	7 – 2 = _____	17 – 9 = _____
10 – 8 = _____	13 – 9 = _____	16 – 7 = _____
1 – 0 = _____	13 – 5 = _____	10 – 4 = _____
8 – 4 = _____	18 – 9 = _____	13 – 8 = _____
3 – 0 = _____	15 – 7 = _____	17 – 8 = _____

c.

2 x 1 = _____	6 x 5 = _____	8 x 1 = _____
1 x 2 = _____	9 x 2 = _____	7 x 8 = _____
2 x 4 = _____	5 x 4 = _____	5 x 3 = _____
4 x 0 = _____	7 x 1 = _____	6 x 2 = _____
3 x 5 = _____	6 x 0 = _____	7 x 4 = _____
2 x 2 = _____	8 x 4 = _____	9 x 4 = _____

4.20 Write the numbers in number word sentences. Use capital letters and periods.

a. 8 + 9 = 17 _____

b. 12 – 7 = 5 _____

c. 4 x 3 = 12 _____

SELF TEST 4

4.01 Write the terms. (each answer, 1 point)

_____ $\frac{1}{4}$ _____

_____

4.02 Draw a box and divide it into 8 parts. (each answer, 1 point)

a. Shade one part.
Express the shaded part as a fraction. _____

b. Draw circles in three parts of the box.
Express the circled parts as a fraction. _____

c. Draw x's in two parts of the box.
Express these parts as a fraction.

d. Express the parts you have not marked as a fraction. _____

4.03 Draw a set of five apples. Circle 4 of the apples. (each answer, 1 point)

a. Express the apples that have been circled as a fraction. _____

b. Write the fraction in words. _____

4.04 Write the word for the fraction. (each answer, 1 point)

$\frac{2}{12}$ _____ $\frac{1}{3}$ _____

4.05 Write the fraction for the word. (each answer, 1 point)

five-eighths _____ seven-ninths _____

4.06 Show two possible combinations of dollars and coins for each amount of money. (each combination, 1 point)

	dollars	half-dollars	quarters	dimes	nickels	pennies
$4.72	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____

4.07 Write the money in numbers. (each answer, 1 point)

a. five dollars and forty-eight cents _____

b. sixty-three dollars and seven cents _____

4.08 Write the numbers in number word sentences. (each answer, 1 point)

a. 5 + 8 = 13 _____

b. 8 – 0 = 8 _____

c. 6 x 9 = 54 _____

16/20

My score _____
Teacher check _____

V. PART FIVE

Learn Box

I can read and write
about the things I have learned.

5.1 If Joan sold 5 candy bars to her aunt, 4 to her cousin, and 6 to her neighbor, how many did she sell altogether? _____

5.2 If 485 is the minuend and 312 is the subtrahend, what is the difference? _____

5.3 Complete the facts. 2 x 6 = _____ 8 x 5 = _____ 6 x 9 = _____

5.4 Keith and John collected 34 baseball cards. They decided to sell 5 to Jim and 4 to George. How many did they have left? _____

5.5 The addends are 15, 25, 56, and 32. What is the sum? _____

5.6 Write a multi-digit number using the 4 in the ones' place, 8 in the tens' place, and 5 in the hundreds' place.

5.7 Complete the facts. 9 x 5 = _____ 4 x 7 = _____ 2 x 8 = _____

5.8 Lisa has read 142 pages of her book. Her book is 221 pages long. How many pages does she have left to read? _____

5.9 In the number 3,925, what is the value of the digit 9? _____

5.10 Find the sum of the addends 33, 825, 2,445, and 34. _____

Cardinal numbers tell 'how many'.

1 2 3 4 5 6 7 8 9 10

Ordinal numbers tell 'which one'.

first second third fourth fifth sixth seventh eighth ninth tenth

5.11 Write the cardinal number on the line.

a. How many people sing in a solo? _____

b. How many inches in a foot? _____

c. How many hours in a day? _____

d. How many pennies in a dollar? _____

e. How many inches in a yard? _____

f. How many minutes in an hour? _____

g. How many nickels in a dollar? _____

h. How many feet in a yard? _____

i. How many days in a week? _____

j. How many months in a year? _____

5.12 Write the ordinal number. Write it as a word.

a. George Washington was the _____ President of the United States.

b. June is the _____ month of the year.

c. November is the _____ month of the year.

d. Monday is usually the _____ school day of the week.

e. December 21, is usually the _____ day of winter.

f. May is the _____ month of the year.

5.13 Write the place of the underlined digit in the number.

a. 5,283 _____

b. 6,248 _____

5.14 Write the ordinal number.

a. In the sequence 4, 8, 12, 16, the number 8 is the _____ number in the sequence.

b. In the sequence 1, 2, 4, 6, 8, the number 6 is the _____ number in the sequence.

5.15 Write the number 9,358 in expanded form. _____ + _____ + _____ + _____

5.16 List the digits. _____

5.17 Complete the facts. 4 x 3 = _____ 9 x 8 = _____ 7 x 6 = _____

5.18 458 + 325 + 463 = _____

5.19 What is the ...

a. next number in the sequence 3, 6, 12, ...? _____

b. pattern of the sequence? _____

5.20 Jean went to Mary's house at 1:00. Her mother told her to be home three hours later. What time should Jean be home? _____

Was the time that Mary should be home AM or PM? _____

5.21 Which number is closer to 385? 234 or 450? _____

5.22 John, Mary, and Carol are putting a puzzle together. John has found 35 pieces and Mary has found 28. If there are 100 pieces in the puzzle, how many pieces are left for Carol to find? _____

5.23 What number is 30 more than 28? _____

5.24 Write two thousand, fifty-six in digits. _____

5.25 Think the problem. Write the answer. 7 + 5 + 8 + 2 = _____

5.26 Ken went to the store for his mother. He spent $2.37 on groceries. His mother said he could spend 35¢ on candy. What was his change from a five dollar bill? _____

5.27 Write the numbers 3, 8, 9, 4, 2 in order from smallest to largest. _____

5.28 Write the numbers 485, 460, 475 in order from largest to smallest. _____

5.29 What is the difference of 1,289 and 943? _____

5.30 Julie's mother bought 6 peaches. Julie ate two of them. Express the number of peaches that Julie ate as a fraction. _____

5.31 If you have two quarters, one dime, and three nickels, how much money do you have? _____

5.32 If the digit 5 is in the ones' place, 0 is in the tens' place, 8 is in the hundreds' place, and 6 is in the thousands' place, what is the number? _____

5.33 Paul's dog has 6 puppies. Three of them are a mixture of black and white, two are all black, and one is all white. Express as a fraction the number that are ...

a. black and white. _____ b. all black. _____ c. all white. _____

5.34 Write 6 numbers using the digits 4, 9, 7. Write them in order of smallest to largest.

_____, _____, _____, _____, _____, _____

5.35 Jim is helping his dad cook hamburgers for his family and friends. There are 15 people. Each person wants two hamburgers. Three people want hamburgers with cheese. Two people want hamburgers with mustard. Two people want hamburgers with catsup. The rest want them plain. How many plain hamburgers will Jim and his dad make? _____

5.36 Find the sums.

a.

+	5	4	3
6			
5			
9			

b.

+	7	2	9
4			
3			
0			

5.37 These boxes have some addends and some sums missing. Look for a starting place. Then, fill in the missing numbers.

a.

+	1		5
9		12	
	3		
6	7		

b.

+		6	
8	12		
0			8
		11	

5.38 Write six multiplication facts equal to 12.

x ____ 12   x ____ 12   x ____ 12   x ____ 12   x ____ 12   x ____ 12

SELF TEST 5

(each answer, 1 point)

5.01 The addends are 589 and 264. What is the sum? _____

5.02 Write a multi-digit number with 6 in the hundreds' place, 8 in the ones' place, and 0 in the tens' place. _____

5.03 Betty has read 58 pages in her book. Her book is 132 pages long. How many pages does she have left to read? _____

5.04 If 129 is the subtrahend and 245 is the minuend, what is the difference? _____

5.05 How many hours in a day? _____

Is your answer a cardinal or ordinal number? _____

5.06 May is the _____ month of the year.

Is your answer a cardinal or ordinal number? _____

5.07 Write the missing number in the sequence. 24, 21, 18, _____, 12, ...

Describe the pattern of the sequence. _____

5.08 Larry had 8 crayons on his desk but 2 fell on the floor. Express the number of crayons that fell on the floor as a fraction. _____

5.09 Write the place of the underlined digit in the number.

a. 7,6<u>3</u>1 _____ b. <u>4</u>,582 _____

5.010 Write the number 5,093 in expanded form. _____ + _____ + _____ + _____

(this question 2 points)

MATHEMATICS

401

LIFEPAC TEST

80/100

Name _____

Date _____

Score _____

MATHEMATICS 401: LIFEPAC TEST

Each numbered question (1–9) equals 1 point.

1. List the digits. _____

Complete the problem and name the parts.

423	2. _____
+ 331	3. _____
4. _____	5. _____
432	6. _____
− 295	7. _____
8. _____	9. _____

Each numbered question (10–25) equals 4 points, except 16 and 23.

10. Write a multi-digit number with 6 in the tens' place, 7 in the thousands' place, 0 in the hundreds' place, and 5 in the ones' place. _____

11. Write the number 5,063 in words. _____

12. Write one thousand, two hundred six in digits. _____

13. Expand 7,083. _____+_____+_____+_____

14. What is ...
    a. the missing number in the sequence? 24, 20, 16, _____, 8, 4,...

    b. what is the pattern of the sequence? _____

15. Write the number 2 in words ...
    a. as a cardinal number. _____,

    b. as a ordinal number. _____.

16. Show two possible combinations of dollars and coins for each amount of money, (each combination 1 point).

	dollars	half-dollars	quarters	dimes	nickels	pennies
$6.39	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____

Each numbered question equals 4 points.

In the fraction $\frac{2}{3}$ ...

17. the *whole* is represented by the number _____.

18. the *part* we are talking about is _____.

19. the numerator is _____, the denominator is _____.

20. Write the fraction $\frac{3}{4}$ in words. _____

21. Write seven-eighths as a fraction. _____

22. Draw an illustration of the fraction $\frac{3}{4}$.

This problem equals 9 points.

23. Complete these facts.

a.

8	6	3	4 + 7 = _____
+ 2	+ 9	+ 5	8 + 6 = _____
			3 + 9 = _____

b.

16	13	8	17 – 8 = _____
– 9	– 10	– 4	18 – 9 = _____
			12 – 5 = _____

c.

3	10	4	3	7	4
x 9	x 8	x 2	x 3	x 4	x 5

Each problem equals 4 points.

24.

38	679	8,546	843
+ 75	+ 243	+ 2,079	267
			+ 591

25.

98	63	350	506
– 39	– 28	– 149	– 278