Placement Test B

ADDITION & SUBTRACTION

Developmental Mathematics

PLACEMENT TEST B

How to Use the Placement Test

The Placement Test pamphlet is composed of three parts; the student's Placement Test, the educator's Placement Guidelines, and the Placement Key. The educator's Placement Guidelines and the Placement Key are contained on the inside front cover and inside back cover of the pamphlet, respectively. The student's Placement Test is enclosed as the eight-page contents of the pamphlet. Please remove the cover of the Placement Test pamphlet for the educator, so the student does not have access to the Placement Key. Give the eight-page Placement Test to the student for completion, and use the following Placement Guidelines and Placement Key to check his or her work. It's as easy as 1, 2, 3!

Placement Guidelines

Placement Test B covers the theoretical concepts, basic facts, and practical skills in *Developmental Mathematics* Levels 5, 6, and 7. The specific Placement Test questions that address these Levels are as follows:

Level 5.   Tens and Ones: Simple Additions and Subtractions. Questions 1 - 8
Level 6.   Tens and Ones: Adding with Grouping. Questions 9 - 13
Level 7.   Tens and Ones: Subtracting with Exchange. Questions 14 - 18

The student should attempt to complete the entire Placement Test until he or she cannot proceed without aid. After the student completes the questions, the educator should analyze the responses that address a specific Level, item by item, and evaluate the quality of the student's performance. The usual results that have been observed show a decrease in the quality of the student's performance in the more complicated concepts tested toward the end of the Placement Test. If *most* of the answers given are correct, then the student has successfully passed the current Level of the Placement Test. However, if *most* of the answers are incorrect or the student is hesitant in giving his or her answers, then the student is in need of practice, and he or she should begin the *Developmental Mathematics* curriculum with the current Level. Good Luck!

Mathematics Placement and Scoring System *(MPASS)*

Mathematics Programs Associates (MPA), with the expertise of Pyramid Software, has developed an automated computerized version of the *Developmental Mathematics* placement framework, available on disk and on the World Wide Web. Visit our internet distributor at www.greatpyramid.com, and find the placement mechanism within the mathematics section of the product module. You can also learn more about MPA and *Developmental Mathematics* and order other great products available through Great Pyramid. Have fun!
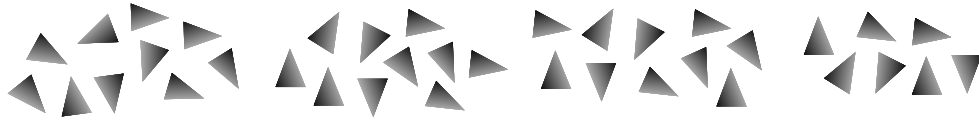
PLACEMENT TEST B
Addition and Subtraction: Basic Skills

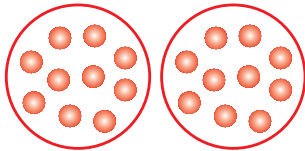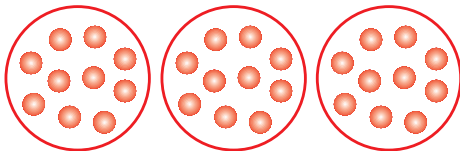Name:_____Date:_____

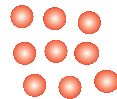1. a. How many items? Write the word.

_____

b. How many items?

TENS	ONES

c. How many items?

TENS	ONES

d. How many items?

TENS	ONES

2. a. How many cents?

TENS	ONES

b. How many cents?

TENS	ONES

c. How many cents?

TENS	ONES

3. a. 32 + 25 = ___
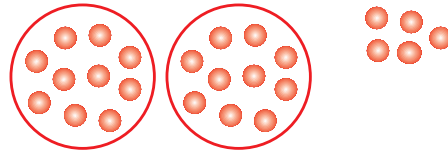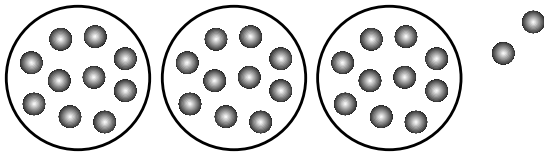
b. Make the picture show it.

4. Write the answer:

a. 25 + 30 = _____   b. 62 + 4 = _____   c. 45 + 54 = _____

d. 21 + 8 = _____   e. 35 + 41 = _____   f. 27 + 60 = _____

g. 31 + 47 = _____   h. 68 + 20 = _____   i. 43 + 3 = _____

5. How much money is shown?

a.   b.

_____   _____

c. 1 quarter and 3 dimes: _____

d. 5 dimes and 1 nickel: _____
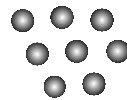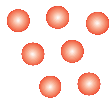
e. 1 quarter, 1 dime, and 1 cent: _____
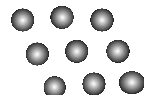
f. 4 dimes, 1 quarter, and 3 cents: _____

6. a. 46 – 12 = ___

    b. Make the picture show it.

7. Write the answer:

    a. 58 – 21 = _____   b. 65 – 23 = _____   c. 89 – 75 = _____

    d. 73 – 52 = _____   e. 36 – 16 = _____   f. 47 – 15 = _____

    g. 35 + 4 = _____   h. 98 – 5 = _____   i. 84 + 2 = _____

    j. 69 – 1 = _____   k. 14 + 1 = _____   l. 75 – 5 = _____

8. Write number sentences:

    a. Bob had 45¢.
       He spent 21¢.
       How much does he have now?   _____

    b. Sue had 47¢.
       Her Dad gave her 32¢.
       How much does she have now?   _____

    c. Mom spent $43.
       She still has $31.
       How much did she have?   _____

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9. a. You have 7 items.

You want to add 8 items.

Make the picture show it.

b. You have 5 items.

You want to add 9 items.

Make the picture show it.

10. Write the answer:

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

11. a. 26 + 4 = ___

b. Make the picture show it.
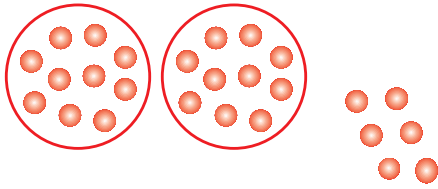
c. Do it step by step:
_____
_____

12. Write the answer:

a. 35 + 5   =   _____   b. 48 + 2   =   _____   c. 67 + 3   =   _____

d. 52 + 8   =   _____   e. 63 + 7   =   _____   f. 21 + 9   =   _____

g. 28 + 7   =   _____   h. 56 + 9   =   _____   i. 35 + 6   =   _____

j. 35 + 15   =   _____   k. 46 + 34 =   _____   l. 21 + 39 =   _____

m. 57 + 18 =   _____   n. 25 + 29 =   _____   o. 56 + 27 =   _____

p. 39 + 8 + 5 =   _____   q. 28 + 7 + 29 =   _____

r. 16 + 8 + 25 + 7 =   _____   s. 9 + 8 + 7 + 36 =   _____

13. Write the answer:

a.	b.	c.	d.
62 + 8	23 + 7	52 + 28	76 + 14
e.	f.	g.	h.
29 + 5	45 + 8	45 + 17	69 + 21
i.	j.	k.	l.
39 25 + 14	28 47 + 15	14 9 + 18	9 27 18 + 9

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14. Write the answer:

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

15. a. 41 − 5 = ___

    b. Make the picture show it.
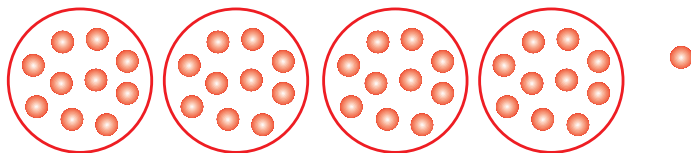
16. Write the answer:

    a. 70 − 8 = _____   b. 40 − 6 = _____   c. 30 − 3 = _____

    d. 24 − 9 = _____   e. 51 − 6 = _____   f. 61 − 5 = _____

    g. 50 − 37 = _____   h. 50 − 48 = _____   i. 40 − 26 = _____

17. Write the answer:

a. 60 − 7	b. 40 − 2	c. 70 − 3	d. 50 − 9
e. 42 − 8	f. 74 − 7	g. 96 − 9	h. 24 − 8
i. 80 − 16	j. 40 − 18	k. 50 − 17	l. 60 − 52
m. 46 − 27	n. 64 − 39	o. 72 − 58	p. 35 − 27

18. Write the number sentences:

a. You bought this ship.

48¢

Now you have 19¢.
How many cents did you have? _____

b. The pen and the writing
pad together cost 93¢.

75¢
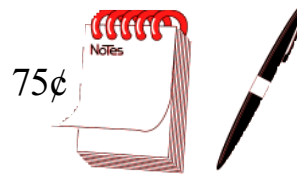
How much does the pen cost? _____

c. Tom jumps 17 inches longer than Sam.
Sam's jump is 46 inches.

How long is Tom's jump? _____

d. Mom bought 3 dozen eggs.
We ate 19 eggs.

How many eggs does she have left? _____

e. Jack has 18 stamps more than Fred.
Jack has 72 stamps.

How many stamps does Fred have? _____

f. Which is more:

(80 – 58) or (62 – 37)? _____

Although some of the answers may seem quite obvious, we have included the answers to all of the Placement Test questions within the following table.

Level 5		Level 6		Level 7	
Question	Answer	Question	Answer	Question	Answer
1a	Thirty-Seven	9a		14	8, 7, 2
1b	27	9b			1, 5, 9
1c	30	10	10, 14, 16		4, 3, 6
1d	9		11, 12, 12		4, 8, 8
2a	51		10, 15, 11		6, 7, 9
2b	4		11, 10, 12		4, 3, 5
2c	70		17, 11, 13		6, 7, 7
3a	57		11, 17, 15		5, 4, 2
3b			12, 10, 10		8, 8, 9
4a	55		11, 10, 11		6, 7, 5
4b	66		12, 14, 13		8, 9, 9
4c	99		15, 13, 14		8, 7, 6
4d	29		12, 10, 16		9, 9, 8
4e	76		16, 10, 12		5, 6, 7
4f	87		15, 14, 10		9, 3, 9
4g	78		13, 14, 11	15a	36
4h	88		18, 13, 13	16a	62
4i	46	11a	30	16b	34
5a	28	12a	40	16c	27
5b	57	12b	50	16d	15
5c	55	12c	70	16e	45
5d	55	12d	60	16f	55
5e	36	12e	70	16g	13
5f	68	12f	30	16h	2
6a	34	12g	35	16i	14
6b		12h	65	17a	53
7a	37	12i	41	17b	38
7b	42	12j	50	17c	67
7c	14	12k	80	17d	41
7d	21	12l	60	17e	34
7e	20	12m	75	17f	67
7f	32	12n	54	17g	85
7g	39	12o	83	17h	16
7h	93	12p	52	17i	64
7i	86	12q	64	17j	22
7j	68	12r	56	17k	33
7k	15	12s	60	17l	8
7l	70	13a	70	17m	19
8a	45 − 21 = 24	13b	30	17n	25
8b	47 + 32 = 79	13c	80	17o	14
8c	43 + 31 = 74	13d	90	17p	8
		13e	34	18a	48 + 19 = 67
		13f	53	18b	93 − 75 = 18
		13g	62	18c	17 + 46 = 63
		13h	90	18d	36 − 19 = 17
		13i	78	18e	72 − 18 = 54
		13j	90	18f	62 − 37 = 25
		13k	41		
		13l	63		

Mathematics Programs Associates (MPA),
a Long Island based family enterprise providing educational
products and consulting services, exists today primarily due to the
vision and determination of its founder, Dr. L. George Saad. During the early
1950's, Dr. Saad taught mathematics education at the University of Ain-shams in
Cairo, Egypt. In 1954, with an innovative idea for self-induced learning, he matriculated
as a doctoral candidate at the University of Birmingham in England. During the following
three years, Dr. Saad devoted his research to the elementary and secondary students'
understanding of basic mathematics and developed the methodology for a self-teaching
mathematics program. In 1957, Dr. Saad received the Ph.D degree in mathematics education.
He then returned to Cairo and, sponsored by the Egyptian government, began the development of
a mathematics curriculum for implementation throughout the country's elementary school system.
In 1959, samples of Dr. Saad's materials were pilot tested within the Cairo schools and, a few years
later, his curriculum was being used throughout the country and in other Middle East nations. Due
to his marked popularity in the Middle East, in 1969, Dr. Saad was invited to the United States as
a visiting professor at the State University of New York, and in the same year, accepted a
professorship at Long Island University. In 1970, with an inspiration to repeat his success,
Dr. Saad immigrated his family to the United States and began working on the rudiments
of a self-teaching mathematics workbook series. In 1974, he incorporated MPA in
New York to design, develop, and distribute his work. Today, educators and
students in the United States, and many other nations throughout the world,
are benefiting from Dr. Saad's lifelong achievement...

Developmental Mathematics:
A Self-Teaching Program