DIRECTIONS, RECORD SHEET, AND ANSWERS FOR

SANGREN-REIDY SURVEY TESTS IN ARITHMETIC

DIVISION III—FORM 1

Grade	School		Date
City	***************************************	State	

INSTRUCTIONS FOR GIVING

- 1. The teacher should go through the test booklet before giving it in order to know the test and to understand what the pupils are doing while taking it.
- 2. Each pupil should have at least two sharpened pencils. Only pencil is to be used. The teacher should have an extra supply of sharpened pencils on hand in case of need.
- 3. Say to the class, "We are going to have a test in arithmetic. I will give you each a copy of the test. Do not look in it or write anything on it until I tell you to." Give each pupil a copy of the test, and tell the pupils to fill in the blanks at the top of the front page of the test (name, date, age, etc.), but not to read any part of the test.
- 4. When this is done, say, "In this test you are asked to study each example before you try to work it and to see what you are to do. Try to do each example correctly. You may make some mistakes, but be sure that you see how to do the work. Always begin with the first example and work across the page. Now open your test folders to Test 1, A. Division of Decimals, and fold the next page under so that you cannot see it." (The teacher should illustrate how this is done.) "Work across the page. When you finish A. Division of Decimals go on to B. Reading Problems. If you finish this page before I tell you to stop, do NOT go to Test 2 but go over your work to make sure that no mistakes haveReady, BEGIN!" been made.
 - 5. At the end of 10 MINUTES, say "STOP!"
- 6. Then say, "Now turn your test folders over so that you can read Test 2, PROBLEM SOLVING." (The teacher should make sure that each pupil has Test 2 correctly before him.) "Let us read the di-

- rections at the top of the page: 'Find the answers to these problems. Write the answers in the parentheses () at the right. Use other paper to figure on, if you want to.' Are there any questions concerning these directions?" The teacher should make sure that the pupils know what they are to do. "Ready, BEGIN!"
 - 7. At the end of 10 MINUTES, say "STOP!"
- 8. Then say, "Now turn your test folders over to the last page so that you can read Test 3, Mensuration." (The teacher should make sure that each pupil has Test 3 correctly before him.) "Let us read the directions at the top of the page: 'Solve these problems. Place the answers in the parentheses () at the right. Use other paper to figure on, if you need to.' Are there any questions concerning these directions?" The teacher should make sure that the pupils know what they are to do. "Ready, BEGIN!"
 - 9. At the end of 10 MINUTES, say "STOP!"...
- 10. Then say, "Now turn your test folders completely over to the front page so that you can read Test 4, Percentage." (The teacher should make sure that each pupil has Test 4 correctly before him.) "Let us read the directions at the top of the page: 'Solve these problems. Place the answers in the parentheses () at the right. Use other paper to figure on, if you need to.' Are there any questions concerning these directions?" The teacher should make sure that the pupils know what they are to do. "Ready, BEGIN!"
- 11. At the end of 4 MINUTES, say "STOP!" and collect all test folders.

INSTRUCTIONS FOR SCORING

- 1. Each correct answer counts one point. The pupil's score is the number of examples correct. The highest possible score on Division III, Form 1, is 63 points.
 - 2. The scoring key is given on page 6. It is sug-

gested that the teacher take an unused copy of the test and mark on it the correct answers in some conspicuous color. Using this as her guide, the pupils' test papers can be scored rapidly and accurately.

TEST 4 ity to Think percent as a sign for hundredths percent as a whole number of hundredths one as 100% any number of hundredths as % units percent as a fraction of 100 the numerator of the fraction as % units
circumference in terms of diameter area in terms of radius — area in terms of length and breadth of area of a square in terms of perimeter area in terms of breadth and mean length area in terms of base area and height volume in terms of base area and height volume as base area times height hypotenuse in terms of squares on sides 3 areas in terms of base and height volume in terms of diameter of sphere comparative sizes from a graph area relations in terms of length on a graph TEST 4 Ity to Think percent as a sign for hundredths percent as a whole number of hundredths one as 100% any number of hundredths as % units percent as a fraction of 100 the numerator of the fraction as % units percent as an improper fraction
lity to Think circumference in terms of diameter area in terms of radius — area in terms of length and breadth of area of a square in terms of perimeter area in terms of breadth and mean length area in terms of breadth and mean length volume in terms of base area and height volume as base area times height hypotenuse in terms of squares on sides 3 areas in terms of base and height volume in terms of base and height area in terms of diameter of sphere comparative sizes from a graph area relations in terms of length on a graph TEST 4 Hity to Think percent as a sign for hundredths percent as a swhole number of hundredths one as 100% any number of hundredths as % units percent as a fraction of 100 the numerator of the fraction as % units
TEST 4 ility to Think percent as a sign for hundredths percent as a whole number of hundredths one as 100% any number of hundredths as % units percent as a fraction of 100 the numerator of the fraction as % units
one as 100% any number of hundredths as % units percent as a fraction of 100 the numerator of the fraction as % units
) percent in terms of an improper fraction hundredths as a percent percent in terms of a two-place decimal the fraction of a percent as thousandths fractional percents in terms of decimals an incomplete decimal for 1/3 % of percent, when a multiplier, as hundredths

CLASS RECORD						" Tear-Off Sheet"									
Summary of Individual Record Sangren-Reidy Survey Arithmetic Tests DIVISION III FORM 1				urvey thmetic Fests SION III	Summary of Individual Record				Sangren-Reidy Survey Arithmetic Tests Division III— FORM 1 City						
Test 1 Test 3				Test 1 Test 3					tal Ea						
Total	No. of	Total	No. of			Total	No. of	Total	No. of Pupils	(Please fill out this (Please fill out this Record Chart					
Score	Pupils	Score	Pupils	-		Score	Pupils	Score	Pupus		f'' sheet, de- d mail at once		Record	Спаго	
17		13				17		12		to the	Public School	per	_	ber	
15		11				15		11			agton, Illinois)	Number	Total Right	Prob. Number	Total Right
14		10		1		14		10			7	Prob. 1	otal	rob.	otal
13		9				13		9				2	-	0	[
12		8				12		8		100		т	est 1	To	st 3
11		7				11		7		Class	Number	1	est I	10	SE 3
10		6		Class	Number of	10		6		Total Scores	of Pupils	a		8	
9		5		Scores	Pupils .	9		5		62-63	Tupin	b	-	b	
8		4	9	62-63		8		4		60-61		C		c	
7		3		60-61		7		3		58-59	•	d		d	
6		1	<u> </u>	58-59		6		1		56-57		e		e	
5		0		54-55		5		0		54-55		f		f	
3		Total		52-53		3		Total		52-53		g		g	
2		Median		50-51		2		Median		50-51		h		h	
1				48-49		1 1				48-49		i		i	
0					46-47		* -			46-47		j		j	
Total		Test 4		44-45		Total		Te		44-45		k		k	
Median				42-43		Median				42-43		1		1	
		Total No. of	40-41				Total	No. of	38-39		m		m	-	
Test 2	Score Pupils	38-39	38-39		Test 2		Score Pupils			$- \left \frac{\mathbf{n}}{\mathbf{o}} \right $		-			
		36-37		0	_	18		36-37		p		Test	st 4		
Total	No. of	17		34-35		Total Score	No. of Pupils	17		34-35		q	-		
Score	Pupils	16		32-33		!	Tupiis	16	1	30-31		-		8	
15		15		30-31		15		15		28-29		T	est 2	b	
14		14	17 4 11	28-29		14		13		26-27				c	
13	7	13		28-27		12		12		24-25		8.		d	
12		12		22-23		11		11	100000	22-23		b		e	
11 10		11 10		20-21		10	1244316	10		20-21		c		f	
9		9		18-19		9		9		18-19		d	+	g	-
8	1	8		16-17		8		8		16-17		_ e		- h	
7		7		14-15	1	7		7		14-15	1	- f	-	- i	
6		6		12-13		6		6		12-13	-	h h	-	- j	
5		5		10-11		5		5		8-9		$-\frac{n}{i}$	-	$-\frac{\kappa}{1}$	
4		4		8-8		4		4		6-7		- - i	_	m	
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Total	•	Total		Total		Total	-	Total		Media	n	0		r	
Median		Median		Median		Mediar		Median							

TEAR-OFF SHEET

Please fill out, detach, and mail to the Public School Publishing Company, Bloomington, Illinois, immediately after you have given the test, to aid in determining nation-wide standards.

DIRECTIONS H

on the inside sheets of this folder has been prepared. Use a separate chart for each grade (yearly or half-For the convenience of the teacher in analyzing from her class, the diagnostic record chart

Test 1. This pupil's results on Tests 2, 3, and 4 should be similarly recorded. Then, add up the totals of each of the separate tests for each pupil and place the result in the column headed "Total of All Tests." Each child's results should be recorded in similar fashion.

(b) After the pupils' results have been thus entered, the number of marks in each column should be counted, and this total entered at the bottom of the record sheet in the "Total right—each problem" row. Evidently those problems which the fewest pupils had right need most class drill. exercises a, b, c, d, and e correct on Test marks should be made in columns a, b, c, d, and e, and the total score, "5", written in the "Total" column for "Pupil's Name" on line 1. Suppose now they should After the pupils er the pupils' test blanks have been scored be arranged in alphabetical order. The Suppose now this child had written under

(c) The "Summary of Individual Record" should now be filled in. Suppose now the first child made a score of 5 on Test 1 as shown by his individual record. In the "Summary of Individual Record" make a mark opposite "5" in the column headed "No. of Pupils" for Test 1. Each child's results should be remark opposite of the control of each table in the "Total" results should be repupils" for Test 1. Each child's results should be recorded in similar fashion. The figures in the "No. of Pupils" column should now be added and the sum of each table in the "Total"

All parts of the answer must be correct to receive \$125 less 33 1/3% amt. of loss and selling price* amt-inlication, subtraction* multiplication, subtraction* loss \$41.67; selling price \$83.33* Jones 11/24 yards 12,857,142 6/ \$115.76 credit. 9.4248 ft. R RECORDING 185 15/83% \$90.20 6 - xi. .. po ite oc pa number between 120% and 25% 360 cu. in. 11.66+ in. 750 sq. ft. 4.1888 cu. in. Michigan ישבייים שי פיני m. 7. Q. O. n.

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1400

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PROBLEMS

9 p o p p

READING

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.20+ 4.96+

40

6.4 miles \$225,000

130 sq. ft. 4 sq. ft. 75 cu. ft.

1/4 2/5 13/4 21/2

50.2656 sq. ft. 24 sq. ft. 300 ft.

175% 361% 76%

9.4248 ft.

Mensuration

Percentage

Test 4

104.48+

154, 90, 67*

OF

6.30+ 13278.78+

152.08+ 1.75

Test 1,

A and

B

roblem Solving

Test 2

DIVISION

space. After this has been done, count up from the bottom to the median, or middle case, and write the number of the space in which this case falls in the space marked "Median." (If there are 35 pupils, the median is the eighteenth score. If the number of pupils is even, the median is the average of the two middle cases; thus if there were 34 cases, the median would be the average of the 17th and 18th scores.)

(d) The "Class Total Scores" column should now be filled in. Simply count, from the "Total of All the total factor of each pupil the

or 45, place a "3" opposite "44-45" in the "Number of Pupils" column. If five pupils made a score of either 42 or 43, place a "5" opposite "42-43" in the "Number of Pupils" column. Do this until all the pupils' scores have been recorded. The figures in the "No. of Pupils" column should now be added and the sum written at the bottom of this table in the "Total" space. After this has been done, count up from the bottom to the median, or middle case, and write the number of this case in the space marked "Median."

(e) The "Tear-Off" sheet should now be filled in. Simply copy from the Class Record chart the tabulations made for the "Summary of Individual Record" and the "Class Total Scores" column. Get the totals for the column headed "Total Each Item" from the bottom line of the "Individual Record" chart (line marked "Total right—each problem"). Please detach and mail the "Tear-Off" sheet to the Public School Publishing Company, Bloomington, Illinois. number of pupils making each of the indicated scores. For example, if three pupils made a score of either 44 Tests" column, giving the total score of each pupil, the

STUDY OF RESULTS

The column headed "ABILITY, SKILL, JUDG-MENT, OR PROCEDURE INVOLVED IN EACH EXERCISE OF EACH TEST" states the character of difficulties of each pupil and of the class. This

diagnostic feature of the record chart is of extreme value to the teacher in discovering individual and class needs and in planning effective remedial instruction.

TEACHER'S DIAGNOST