

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 have been made. Ready, BEGIN!"

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.

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.

Scoring Key

		Test 1, A and B			Test 2			Test 3			Test 4
				Problem Solving			Mensuration			Percentage	
A DIVISION OF DECIMALS	a.	152.08+		a.	123		a.	9,4248 ft.		a.	15%
	b.	1.75		b.	39		b.	50,2656 sq. ft.		b.	76%
	c.	.973+		c.	114		c.	24 sq. ft.		c.	175%
	d.	6.30+		d.	217		d.	300 ft.		d.	361%
	e.	13278.78+		e.	\$30		e.	130 sq. ft.		e.	1/4
	f.	.20+		f.	6 5/8 miles		f.	4 sq. ft.		f.	2/5
	g.	4.96+		g.	6.4 miles		g.	75 cu. ft.		g.	1 3/4
	h.	104.48+		h.	\$225,000		h.	360 cu. in.		h.	2 1/2
	i.	154, 90, 67*		i.	11/24 yards		i.	11.66+ in.		i.	.25
	j.	.89		j.	12,857,142 6/7		j.	750 sq. ft.		j.	1.5
B READING PROBLEMS	k.	no. bushels sold by Mr. Jones		k.	\$115.76		k.	4,1888 cu. in.		k.	.155
	l.	addition, multiplication*		l.	35%		l.	Michigan		l.	.05125
	m.	276.79 bushels		m.	\$90.20		m.	give credit for any		m.	.0333
	n.	\$125 less 33 1/3%		n.	9,4248 ft.		n.	number between		n.	\$54
	o.	amt. of loss and selling price*		o.	185 15/83%		o.	20% and 25%		o.	10%
	p.	multiplication, subtraction*								p.	1400
	q.	loss \$41.67; selling price \$83.33*								q.	\$2
										r.	\$16

* All parts of the answer must be correct to receive credit.

DIRECTIONS FOR RECORDING

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

(a) After the pupils' test blanks have been scored, they should be arranged in alphabetical order. The name of the first child should then be written under "Pupil's Name" on line 1. Suppose now this child had exercises a, b, c, d, and e correct on Test 1. Check marks should be made in columns a, b, c, d, and e, and the total score, "5", written in the "Total" column for 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.

(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 recorded in similar fashion. The figures in the "No. of Pupils" column should now be added and the sum written at the bottom of each 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 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 Tests" column, giving the total score of each pupil, the number of pupils making each of the indicated scores. For example, if three pupils made a score of either 44 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.

TEACHER'S DIAGNOSTIC STUDY OF RESULTS

The column headed "ABILITY, SKILL, JUDGMENT, 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.