

1902 Math Test/Survey--The Test & The Results

In 1892, Dr. John Rice, who had conducted school survey in 1893, again conducted a math test of **6000** students from 4th to 8th grades distributed through eighteen school buildings in seven cities. [pp. 155f].* See [File 2](#) for the Math Problems Dr. Rice used. The following chart show the tests results:

	GRADES					SCHOOL AVER- AGE	Minutes Daily
	IV	V	VI	VII	VIII		
	Results	Results	Results	Results	Results	Results	
City III	68.4	79.5	79.3	-81.1	-91.7	-80.0	53
City I	72.7	-84.7	80.4	64.2	80.9	76.6	60
City I	—	80.3	-80.9	43.5	72.7	69.3	45
City I	54.5	74.7	72.2	63.5	74.5	67.8	45
City I	60.0	70.8	69.6	54.6	66.5	64.3	45
City II	-81.3	78.2	71.2	33.6	36.8	60.2	60
City III	70.1	53.6	43.7	53.9	51.1	54.5	60
City IV	70.5	73.2	58.9	31.2	41.6	55.1	60
City IV	62.9	70.5	59.8	—	22.5	53.9	—
City IV	59.8	65.3	54.9	35.2	43.5	51.5	60
City IV	53.5	53.5	42.3	16.1	48.7	42.8	—
City V	38.5	67.0	44.1	29.2	51.1	45.9	40
City VI	-28.1	38.1	68.3	33.5	26.9	39.0	33
City VI	41.6	45.3	46.1	19.5	30.2	36.5	30
City VI	36.8	55.0	34.5	30.5	23.3	36.0	48
City VII	59.3	53.7	35.2	29.1	25.1	40.5	42
City VII	47.4	65.4	35.2	15.0	19.6	36.5	45
City VII	41.1	-37.5	-27.6	-8.9	-11.3	-25.3	45
General Average .	59.5	69.4	60.7	39.4	49.4	55.7	—
Number of pupils examined						Total,	5963

(The marks on the highest and lowest scores are added to highlight the differences.)

“Mr. Rice found **great variation** in the reaction of pupils to these questions. The variability was even greater in the advanced grades than in the earlier grades.... Not only were the extremes widely separated, but “the averages for schools taken as a whole varied between 25 and 80 per cent”* [pp.161f.].

*W.A. Jessup and L.D. Coffman, The Supervision of Arithmetic, Macmillan Company, 1917].

The Math tests Dr. J.M. Rice given to 4th to 8th graders are taken from W.A. Jessup and L.D. Coffman, The Supervision of Arithmetic, Macmillan Company, 1917, pp.155ff.

For the tests see “**File 2—A Look At Dr. John Rice’s Tests**”