

Assessment Brief



Number 9

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STANFORD 10 TEST ANNUAL DIVISION HIGHLIGHTS

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ABSTRACT

Virginia Beach City Public Schools partial battery scores (combination of reading, language, and mathematics subtests) were above the 50th percentile for the past three years. Grade 6 and grade 9 content area totals have either remained stable or steadily increased from 2006 to 2008.

Percentile ranks for African American students in grades 6 and 9 have increased slightly from 2006-2008. On average, African American students in all grade levels held the lowest percentile ranks in all content area totals.

For the past three years, the percentile ranks for grade 9 students have been below the 50th percentile on the Mathematics Procedures subtest but has increased steadily each year. For the past three years, the percentile ranks for grade 4 students have been at or below the 50th percentile on the Language Editing subtest and have decreased steadily each year.

Background

The *Stanford Achievement Test Series*, Tenth Edition, (Stanford 10) is a nationally norm-referenced test that is administered to all Virginia Beach public school students in grades 4, 6, and 9 in the fall of each school year. The test results provide information on how Virginia Beach students compare to students across the nation.

The Stanford 10 measures students' achievement in reading, mathematics, language, science, and social science. Virginia Beach students in grades 4, 6, and 9 take the Stanford 10 in reading, language, and mathematics. All test questions on the Stanford 10 are multiple-choice and reflect academic content that is commonly taught in schools across America.

The Stanford 10 reading test includes subtests in Reading Vocabulary and Reading Comprehension. (The Word Study Skills subtest is included as part of the test for fourth grade students only.) Reading passages include original short stories and articles written by published authors of children's and young people's literature. Three types of reading are included: literary, informational, and functional. The language test measures prewriting, composing, editing, and spelling in a holistic fashion that reflects the developmental nature of the writing process. The questions are presented in the context of scenarios that engage students in the assessment. The Stanford 10 mathematics subtests include Mathematics Problem Solving and Mathematics Procedures.

Key Topics:

<i>Methodology</i>	p. 2
<i>Partial Battery</i>	p. 2
<i>Content Area Totals</i>	p. 3
<i>Subtest Performance</i>	p. 5
<i>School Performance</i>	p. 7

These subtests assess the mathematical content recommended by the National Council of Teachers of Mathematics and include number sense and operations; patterns, relationships, and algebra; geometry and measurement; and data, statistics, and probability. Questions are constructed so that students apply basic mathematic procedures and problem-solving strategies to arrive at a solution.

The data presented in this report are based on percentile ranks. Percentile ranks can be used to reliably determine how Virginia Beach students performed in comparison to the national norm group. The national norm group for Stanford 10 is based on the performance of students across the nation who were part of the national standardization sample in 2002. Percentile ranks range from a low of 1 to a high of 99, with a mean of 50. The percentile rank corresponding to a given score indicates the percentage of a reference group obtaining scores equal to or less than that score. Scaled scores provide more reliable indicators of gain/loss than percentile ranks and may be compared from one grade level to another.

Methodology

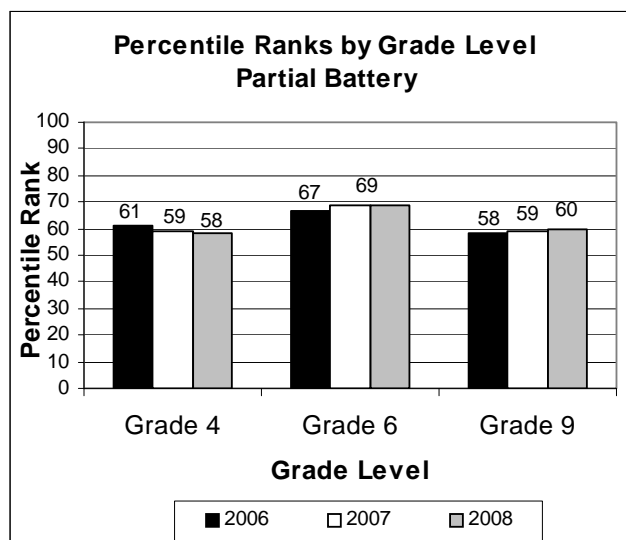
The Virginia Beach data summarized herein were extracted from the district’s data warehouse after Stanford 10 scores were linked with student demographic records. Total Reading, Total Mathematics, and Total Language scores include only scores for students who took all subtests within the subject area. Partial Battery scores are only available for students who have taken all subtests in Total Reading, Total Mathematics, and Total Language. Southeastern Cooperative Educational Program (SECEP) results are not included in the division or school summary results reported. Center students (Center for Effective Learning, Virginia Beach Central Academy, and Open Campus) are included in the division summary, but excluded from the individual school summary results shared in this report. In addition, American Indian and Hawaiian/Pacific Islander students are excluded from the subgroup summary reporting because they comprise less than 1 percent of the student population. Percentile rank changes of 3 percentile points or more have been noted in this report.

OVERALL PERCENTILE RANKS Fall 2006, Fall 2007, Fall 2008

Partial Battery (Total Reading, Total Mathematics, and Total Language combined)

The percentile ranks for grade 4 have gradually decreased over the past three years as seen in Figure 1. The percentile ranks for grade 6 increased 2 percentage points from 2006 to 2007 and remained constant in 2008. The percentile ranks for grade 9 have steadily increased 2 percentage points over the past three years. Overall, grade 6 had higher percentile ranks than grades 4 and 9 in 2006, 2007, and 2008.

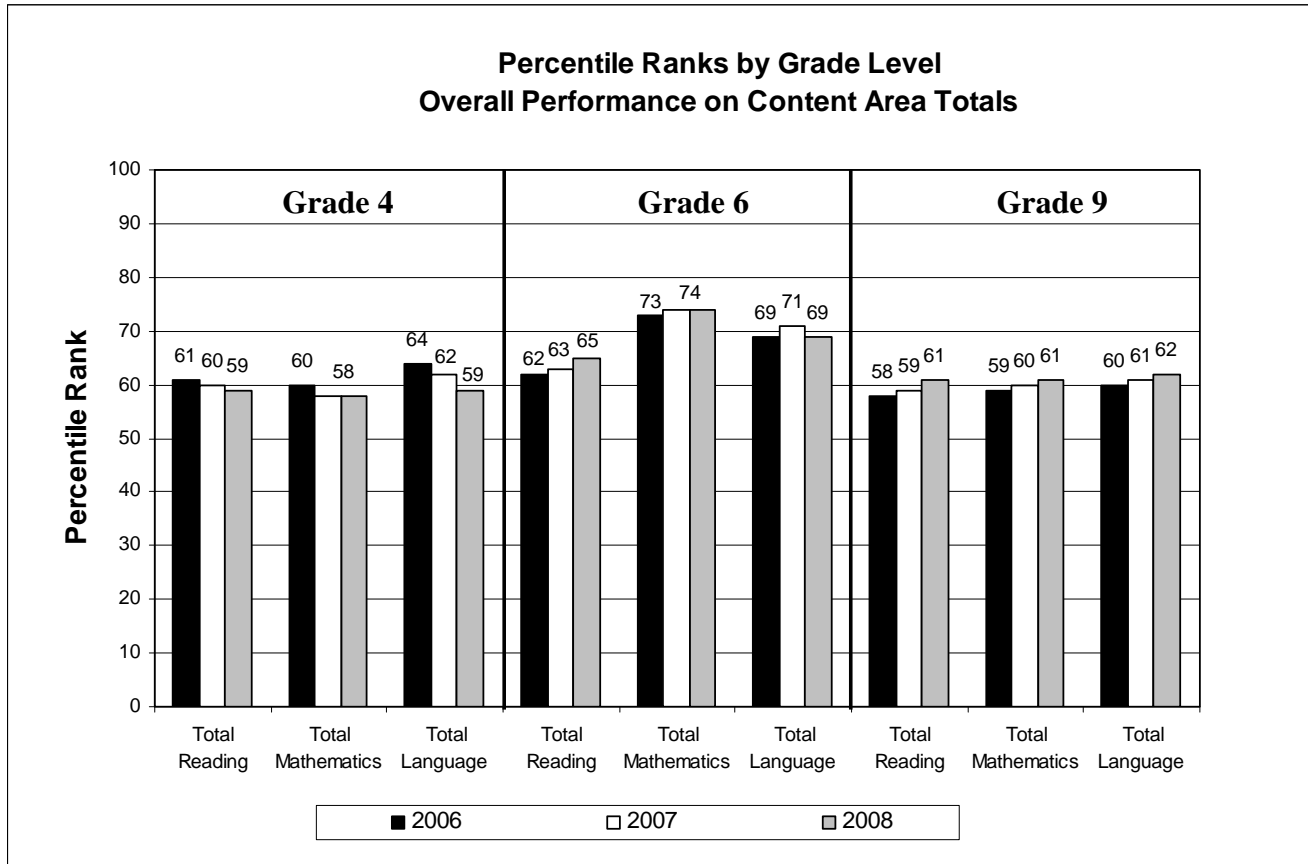
Figure 1



Content Area Totals

The percentile ranks in grade 4 for both Total Reading and Total Language have steadily decreased from 2006 to 2008 as seen in Figure 2. The percentile ranks for grade 4 Total Mathematics decreased by 2 percentage points from 2006 to 2007 but remained constant from 2007 to 2008. The percentile ranks for grade 6 have steadily increased by 3 percentage points in Total Reading over the past three years. The percentile ranks for grade 6 Total Mathematics increased 1 percentage point from 2006 to 2007 but remained the same in 2008. The percentile ranks for grade 6 Total Language increased by 2 percentage points from 2006 to 2007 but decreased by 2 percentage points from 2007 to 2008. The percentile ranks for grade 9 have steadily increased in Total Reading, Total Mathematics, and Total Language over the past three years.

Figure 2

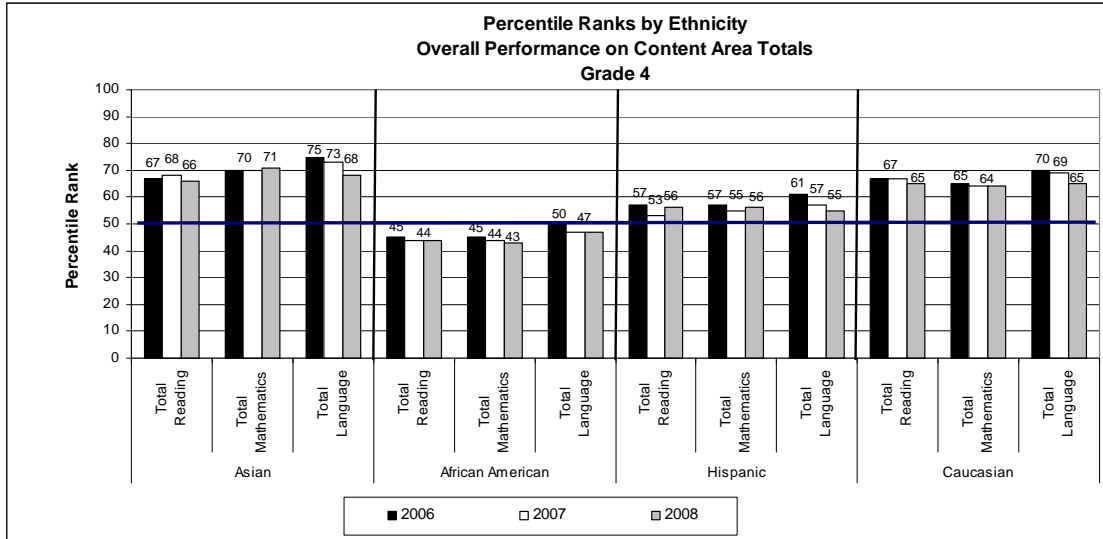


Content Area Totals by Ethnicity

Grade 4

Overall, the percentile ranks for grade 4 have remained steady in Total Reading and Total Mathematics for all ethnic groups over the last three years as seen in Figure 3. The percentile ranks for grade 4 Total Language have decreased from 3 to 7 percentage points for each ethnic group from 2006 to 2008. Grade 4 African American students have been performing at or below the 50th percentile in Total Reading, Total Mathematics, and Total Language over the past three years. On average, Asian students have outperformed all other ethnic groups in 2006, 2007, and 2008.

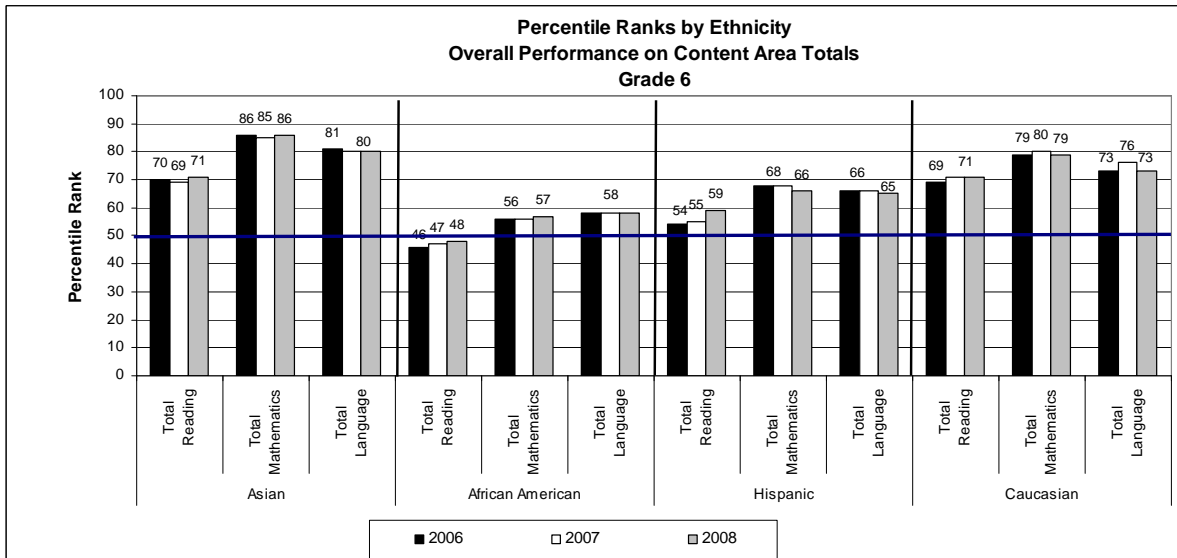
Figure 3



Grade 6

Overall, the percentile ranks for grade 6 Asian students have remained stable in Total Reading, Total Mathematics, and Total Language as seen in Figure 4. The percentile ranks for grade 6 African American students have increased slightly from 2006 to 2008 in Total Reading and Total Mathematics, while Total Language remained the same over the past 3 years. The percentile ranks for grade 6 Hispanic and Caucasian students have increased in Total Reading from 2006 to 2008. On average, grade 6 African American students have been performing below the 50th percentile in Total Reading over the past three years. In most comparisons, Asian students have outperformed all other ethnic groups.

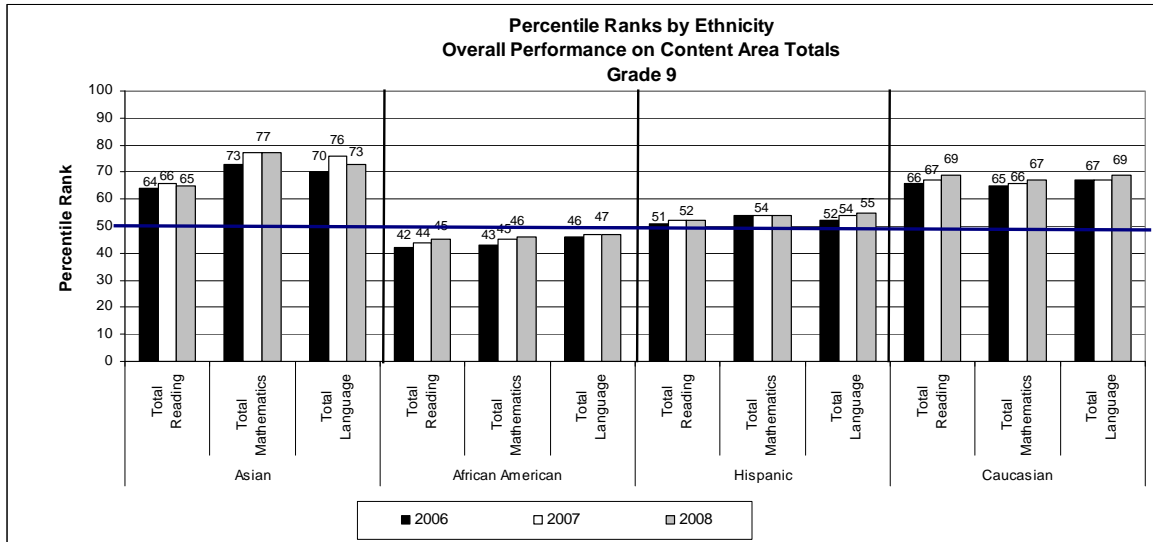
Figure 4



Grade 9

In most cases, the percentile ranks in all three content area totals for grade 9 students in each ethnic group increased from 2006 to 2008 as seen in Figure 5. Overall, the percentile ranks for grade 9 Hispanic students remained the same in Total Mathematics and increased by 1 percentage point in Total Reading from 2006 to 2008. African American students in grade 9 have been performing below the 50th percentile in Total Reading, Total Mathematics, and Total Language over the past three years. Asian students have outperformed all other ethnic groups in Total Mathematics and Total Language, while Caucasian students outperformed all other ethnic groups in Total Reading for the past three years.

Figure 5

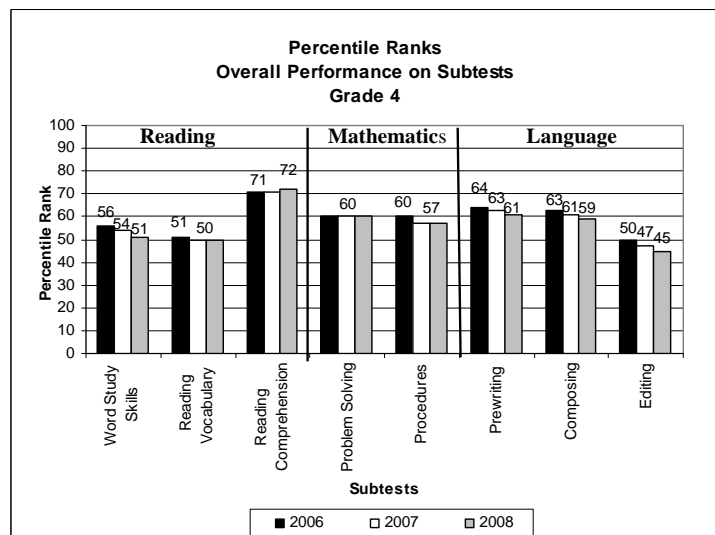


Subtest Performance

Grade 4

The percentile ranks for grade 4 were higher in Reading Comprehension than any other grade 4 subtest as seen in Figure 6. The percentile ranks for grade 4 students have steadily decreased on the Word Study Skills subtest and on all of the language subtests over the past three years. The percentile ranks for grade 4 have remained the same on the Mathematics Problem Solving subtest over the past three years. Although the grade 4 Reading Vocabulary and Mathematics Procedures decreased from 2006 to 2007, both subtests remained the same in 2008.

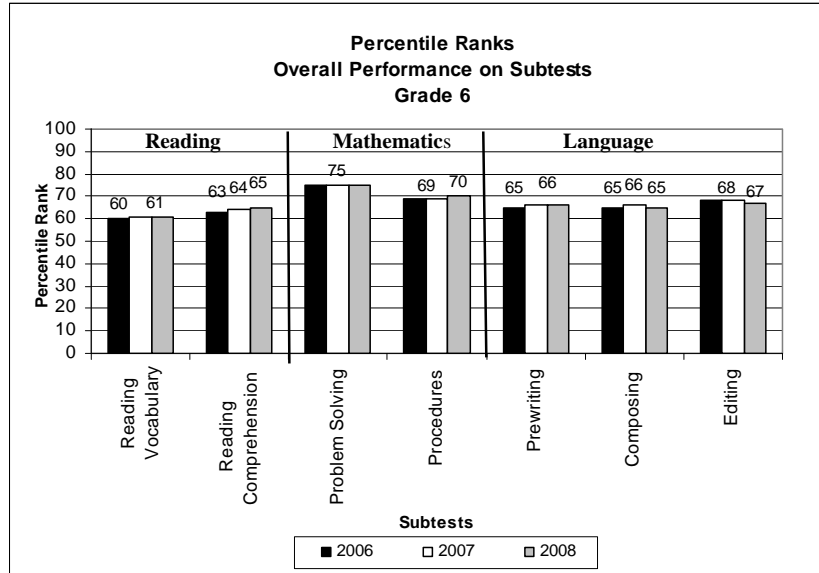
Figure 6



Grade 6

The percentile ranks for grade 6 were higher in Mathematics Problem Solving than any other subtest for 2006, 2007, and 2008 as seen in Figure 7. The percentile ranks for grade 6 have steadily increased by 2 percentage points on the Reading Comprehension subtest from 2006 to 2008. The percentile ranks for most grade 6 subtests remained relatively stable over the past three years.

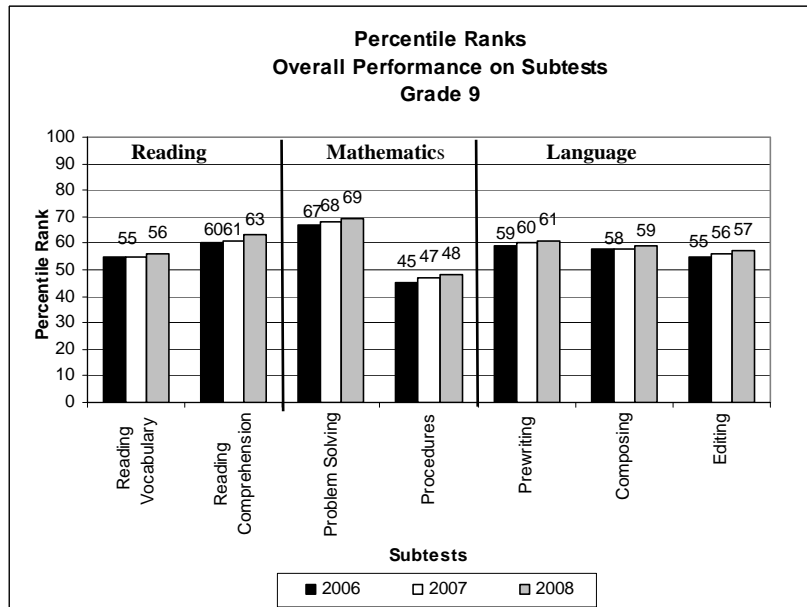
Figure 7



Grade 9

The percentile ranks for grade 9 have increased from 1 to 3 percentage points on all subtests over the past three years as seen in Figure 8. As a group, grade 9 students scored higher in Mathematics Problem Solving than any other subtest for 2006, 2007, and 2008. For the past three years, the percentile ranks for grade 9 students have been below the 50th percentile on the Mathematics Procedures subtest but increasing steadily.

Figure 8



School Performance - Partial Battery percentile ranks reported in 10-point percentile increments are as follows:

Grade 4

The number of elementary schools scoring at or above the 50th percentile national average for the Partial Battery has decreased over the past three years as seen in Table 1. In 2006, 50 of the 56 elementary schools (89%) scored at or above the 50th percentile for the Partial Battery. In 2007, 48 of the 55 schools (87%) scored at or above the 50th percentile, while in 2008, 47 of the 55 schools (85%) scored at or above the 50th percentile.

Table 1

Grade 4 - Partial Battery Percentiles			
Number of Schools			Percentile Range
2006	2007	2008	
0	0	0	90-99
1	1	1	80-89
7	4	4	70-79
19	20	13	60-69
23	23	29	50-59
5	7	8	40-49
1	0	0	30-39

Grade 6

The number of middle schools scoring at or above the 50th percentile national average for the Partial Battery has remained stable from 2006 to 2008 as seen in Table 2. Over the past three years, 100 percent of the middle schools scored at or above the 50th percentile national average for the Partial Battery.

Table 2

Grade 6 - Partial Battery Percentiles			
Number of Schools			Percentile Range
2006	2007	2008	
1	1	1	90-99
0	0	0	80-89
5	6	5	70-79
7	6	7	60-69
1	1	1	50-59
0	0	0	40-49
0	0	0	30-39

Grade 9

The number of high schools scoring at or above the 50th percentile national average for the Partial Battery remained relatively stable over the past three years as seen in Table 3. In 2008, 100 percent of the high schools scored at or above the 50th percentile national average for the Partial Battery.

Table 3

Grade 9 - Partial Battery Percentiles			
Number of Schools			Percentile Range
2006	2007	2008	
0	0	0	90-99
0	0	0	80-89
0	1	0	70-79
5	5	6	60-69
5	4	5	50-59
1	1	0	40-49
0	0	0	30-39