# ISAT Percentiles 2015-2019 

[10th, 25th, 50th, 75th, and 90th percentiles]

Idaho Standards Achievement Tests (SBAC)<br>Mathematics and English Language Arts<br>Idaho Public Schools, Grades 3-8 and 10

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## Percentiles

Percentiles supply performance information across a distribution of scale scores. They enable us to look at the change in each of five performance levels from year to year, and at overall trends.

The five percentiles (i.e., scale scores) may be understood as:
High Score, at or above $90 \%$ of the scale scores on the test-grade
High Average Score, at or above $75 \%$ of the scale scores
Average Score for Grade Level, at or above 50\% of scale scores
Low Average Score, at or above 25\% of the scale scores
Low Score, at or above $10 \%$ of the scale scores
Separate percentiles results are calculated for each year-test-grade, for example 2019 Mathematics Grade 3, or 2017 English Language Arts Grade 10. As noted in short form: 2019MATH3 or 2017ELA10.

An Excel calculator was used to calculate the percentiles (screen shot).
Enter mean and standard deviation for each year-subject-grade.

| Percentile Calculator (ISAT/SBAC) |  |  |
| :--- | :---: | :---: |
| Group Statistics | English LAA | Mathematics |
| Mean / Average | 2551 | 2541 |
| Standard Deviation | 95.097 | 105.316 |
| Enter mean and standard deviation in yellow cells. |  |  |
| 90th percentile | 2673 | 2676 |
| 75th percentile | 2615 | 2612 |
| 50th percentile | 2551 | 2541 |
| 25th percentile | 2487 | 2470 |
| 1Oth percentile | 2429 | 2406 |
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Note: Group can be state, district, school or classroom, by grade.

While this percentile calculator was developed to estimate the 10th, 25th, 50th, 75th and 90th percentiles for the ISAT ELA and MATH tests, it also may be used with means and
standard deviations from other tests such as the ISAT science tests, the high school science end-of-course tests, and the IRI by istation.
http://k12researchidaho.com/pdf/ calculators-effectsizes-percentiles.zip

# Mathematics 

## Percentiles



On the 2019 ISAT Mathematics test for grades 3-8 and 10 across the five percentiles, 2019 overall was 87 scale score points higher than 2018.

On the 2019 ISAT Mathematics test for grades 3-8 and 10, five of 7 grades had double digit scale score gains over 2018: Grade 7 (32 points gain), Grade 5 (25), Grade 4 (15), Grade 3 (13), and Grade 8 (10). Grade 6 lost eight (8) points, and Grade 10 had a zero (0) net gain.

On the 2019 ISAT Mathematics test, each of the five percentiles had statewide gains over 2018: 90th (28 point gain), 75th (25), 50th (18), 25th (10), and 10th (6).

|  | Mathematics, 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10th | Total |
| 90th | 7 | 11 | 11 | 11 | 11 | 9 | 9 | 69 |
| 75 th | 6 | 9 | 9 | 9 | 9 | 7 | 6 | 55 |
| 50th | 4 | 6 | 5 | 5 | 8 | 5 | 2 | 35 |
| 25th | 3 | 5 | 3 | 3 | 8 | 4 | -2 | 24 |
|  | 10th | 2 | 3 | 1 | 1 | 7 | 1 | -5 |
| Total | 22 | 34 | 29 | 29 | 43 | 26 | 10 | 193 |


|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mathematics, 2017 |  |  |  |  |  |  |  |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10th | Total |
| 90th | 0 | 0 | 7 | 4 | 5 | 5 | 9 | 30 |
| 75th | -1 | -1 | 4 | 2 | 3 | 2 | 5 | 14 |
| 50th | -2 | -2 | 2 | 1 | 0 | 0 | 2 | 1 |
| 25th | -4 | -4 | -1 | -1 | -3 | -3 | -1 | -17 |
| 10th | -5 | -5 | -4 | -3 | -6 | -5 | -2 | -30 |
| Total | -12 | -12 | 8 | 3 | -1 | -1 | 13 | -2 |


|  | Mathematics, 2018 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10 th | Total |
| 90th | 6 | 6 | 4 | 9 | 4 | 7 | 8 | 44 |
| 75 th | 4 | 4 | 3 | 8 | 2 | 6 | 6 | 33 |
| 50 th | 3 | 3 | 2 | 6 | 0 | 3 | 3 | 20 |
| 25th | 2 | 2 | 1 | 4 | -2 | 0 | 0 | 7 |
| 10th | 0 | 0 | 0 | 3 | -4 | -1 | -2 | -4 |
| Total | 15 | 15 | 10 | 30 | 0 | 15 | 15 | 100 |


|  | Mathematics, 2019 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10th | Total |
| 90th | 4 | 4 | 7 | -1 | 9 | 3 | 2 | 28 |
| 75th | 4 | 4 | 7 | -1 | 8 | 2 | 1 | 25 |
| 50th | 3 | 4 | 5 | -2 | 6 | 2 | 0 | 18 |
| 25th | 1 | 2 | 3 | -2 | 5 | 2 | -1 | 10 |
| 10th | 1 | 1 | 3 | -2 | 4 | 1 | -2 | 6 |
| Total | 13 | 15 | 25 | -8 | 32 | 10 | 0 | 87 |









# English Language Arts Percentiles 



On the 2019 ISAT English Language Arts test for statewide grades 3-8 and 10 across the five percentiles, 2019 overall was 140 points higher than 2018.
On the 2019 ISAT English Language Arts test for statewide grades 3-8 and 10, four of seven grades had double digit gains over 2018: Grade 7 (54 points gain), Grade 5 (25), Grade 6 (25), and Grade 4 (24). Grade 8 gained eight (8) points and Grade 3 gained six (6) points. Grade 10 lost two (-2) points.
On the 2019 ISAT English Language Arts test, each of the five percentiles had statewide gains over 2018: 90th (46 points), 75th (35), 50th (29), 25th (20), and 10th (10).

|  | English Language Arts, 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10th | Total |
| 90th | 5 | 9 | 8 | 7 | 7 | 6 | 5 | 47 |
| 75th | 4 | 8 | 6 | 6 | 6 | 5 | 4 | 39 |
| 50th | 3 | 7 | 3 | 4 | 5 | 4 | 2 | 28 |
| 25th | 0 | 6 | 0 | 2 | 3 | 3 | 0 | 14 |
| 10th | 0 | 4 | -1 | 1 | 2 | 2 | -2 | 6 |
| Total | 12 | 34 | 16 | 20 | 23 | 20 | 9 | 134 |


|  | English Language Arts, 2017 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10th | Total |
| 90th | -1 | -2 | 3 | 2 | 2 | 0 | -6 | -2 |
| 75th | -4 | -3 | 1 | 0 | 1 | -2 | -6 | -13 |
| 50th | -7 | -5 | -1 | -2 | -1 | -3 | -7 | -26 |
| 25th | -9 | -6 | -3 | -3 | -2 | -4 | -8 | -35 |
| 10th | -12 | -7 | -5 | -5 | -3 | -6 | -8 | -46 |
| Total | -33 | -23 | -5 | -8 | -3 | -15 | -35 | -122 |


|  | English Language Arts, 2018 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10th | Total |
| 90th | 6 | 8 | 5 | 9 | 1 | 4 | 4 | 37 |
| 75th | 6 | 6 | 5 | 7 | 3 | 4 | 3 | 34 |
| 50th | 6 | 4 | 4 | 5 | 1 | 2 | 2 | 24 |
| 25th | 6 | 2 | 3 | 3 | -1 | 0 | 1 | 14 |
| 10th | 6 | 0 | 3 | 1 | -3 | 0 | 0 | 7 |
| Total | 30 | 20 | 20 | 25 | 1 | 10 | 10 | 116 |


|  | English Language Arts, 2019 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3rd | 4th | 5th | 6th | 7th | 8th | 10th | Total |
| 90th | 4 | 6 | 6 | 7 | 15 | 4 | 4 | 46 |
| 75th | 2 | 6 | 5 | 6 | 12 | 3 | 1 | 35 |
| 50th | 1 | 5 | 5 | 5 | 11 | 2 | 0 | 29 |
| 25th | 0 | 4 | 5 | 4 | 9 | 0 | -2 | 20 |
| 10th | -1 | 3 | 4 | 3 | 7 | -1 | -5 | 10 |
| Total | 6 | 24 | 25 | 25 | 54 | 8 | -2 | 140 |









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