



Arkansas Comprehensive Testing, Assessment, and Accountability Program

**Benchmark Examinations**  
**Raw To Scale Score Conversion Tables**  
**April 2007 Administration**

---

## **Introduction**

The *Raw to Scale Score Conversion Tables* provide information on raw scores attained by students for Mathematics or Literacy (Reading and Writing) on the Benchmark Examinations, and how those scores correspond with student scale scores.

**The attached *Raw to Scale Score Conversion Tables* are specific to the April 2007 administration of the Benchmark Examinations and do NOT apply to any other administration.**

## **What are Scale Scores?**

Scale Scores are transformed raw scores. For every possible raw score on a test form, there is a corresponding scale score, although a scale score may represent more than one raw score depending on the distribution of the results. When multiple forms of a test are used, or when results are compared from year to year, scale scores are needed to adjust for possible differences in test form length or difficulty. For example, it would not be possible to interpret a raw score of 50 items correct or points earned without knowing how many items are on the test and how difficult those items are.

## **Why Use Scale Scores?**

Scale scores provide a useful measurement tool for many assessment programs. They are used in numerous national testing programs, including the ACT and SAT examinations, which are typically part of the admissions process for colleges and universities. Scale scores are also routinely used in many other statewide testing programs, providing the basis for long-term, meaningful comparisons of student results across different test administrations.

Educators have always adjusted for differences in test length by changing from “number correct” scores to “percent correct” scores. The next step is to remove differences in item difficulty by moving to “scale scores.” To illustrate the value of this step, consider an examination with just two forms: Form A and Form B. If the items on Form A happen to be slightly more difficult than the items on Form B, one would expect a student to answer a higher percentage of items correctly if Form B were administered rather than Form A. However, a student should receive the same scale score for either form.

Scale scores are intended to make scores more meaningful by defining a scale of measurement that is not tied to a particular form of a test. However, to be meaningful, the scale must be tied to a benchmark that is meaningful to the user. The Benchmark Examinations were constructed so that a specific score for Mathematics and a specific score for Literacy correspond to the Advanced, Proficient, Basic, and Below Basic performance levels. In the future, these values may correspond to different raw scores, but they will have the same meaning in terms of student performance.

## April 2007 Scale Scores

The attached *Raw to Scale Score Conversion Tables* list the total number of raw score points available for Mathematics and for Literacy (Literacy is the combined number of points for the Reading and Writing sections of the test), as well as the associated scale scores for the two content areas. While the scale scores for the two content areas are listed in conjunction with similar raw score scales, it is important to understand that the scale scores for the two content areas are not connected and should not be considered equivalent in any sense. These scores differ due to the uniqueness of the content areas and the student results relative to Mathematics and Literacy. For example, there are fewer raw score points available for Mathematics than for Literacy (i.e., 80 versus 96), but the same range of scale scores associated with Mathematics are also associated with Literacy. However, the overall distribution of student performance results for Mathematics differed from the results for Literacy, and this difference in the distribution of results, relative to the unique content areas, accounts for the differences in the scale scores. Given the differences between the two content areas and the differences in student performance results, it is not appropriate to compare the two sets of scale scores.

The table below lists the performance levels and associated scale scores ranges for the Benchmark Examinations. **Again, the scale score information listed in this table is specific to the April 2007 administration of the Benchmark Examinations and does NOT apply to any other administration.**

**2007 Benchmark Examinations  
Scale Score Ranges for Mathematics and Literacy**

| Grade | Mathematics |         |            |          | Literacy    |         |            |          |
|-------|-------------|---------|------------|----------|-------------|---------|------------|----------|
|       | Below Basic | Basic   | Proficient | Advanced | Below Basic | Basic   | Proficient | Advanced |
| 3     | 0–408       | 409–499 | 500–585    | 586–999  | 0–329       | 330–499 | 500–653    | 654–999  |
| 4     | 0–494       | 495–558 | 559–639    | 640–999  | 0–353       | 354–558 | 559–747    | 748–999  |
| 5     | 0–543       | 544–603 | 604–696    | 697–999  | 0–381       | 382–603 | 604–798    | 799–999  |
| 6     | 0–568       | 569–640 | 641–721    | 722–999  | 0–416       | 417–640 | 641–822    | 823–999  |
| 7     | 0–621       | 622–672 | 673–763    | 764–999  | 0–425       | 426–672 | 673–866    | 867–999  |
| 8     | 0–654       | 655–699 | 700–801    | 802–999  | 0–506       | 507–699 | 700–913    | 914–999  |

The Benchmark Examinations *Report Interpretation Guide* contains more information on the development of the performance levels. For additional information about the results and information on student performance, please contact:

Dr. Gayle Potter, Associate Director  
Curriculum, Assessment, and Research  
Arkansas Department of Education  
4 State Capitol Mall, Room 106A  
Little Rock, AR 72201-1071  
Telephone: 501-682-4558

## 2007 Grade 3 Benchmark Examination Raw to Scale Score Conversion Tables for Mathematics

| BELOW BASIC |             |
|-------------|-------------|
| Raw Score   | Scale Score |
| 0           | 34          |
| 1           | 87          |
| 2           | 167         |
| 3           | 207         |
| 4           | 236         |
| 5           | 259         |
| 6           | 279         |
| 7           | 296         |
| 8           | 311         |
| 9           | 324         |
| 10          | 336         |
| 11          | 348         |
| 12          | 358         |
| 13          | 368         |
| 14          | 378         |
| 15          | 386         |
| 16          | 395         |
| 17          | 403         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 18        | 411         |
| 19        | 418         |
| 20        | 425         |
| 21        | 432         |
| 22        | 439         |
| 23        | 446         |
| 24        | 452         |
| 25        | 458         |
| 26        | 465         |
| 27        | 471         |
| 28        | 476         |
| 29        | 482         |
| 30        | 488         |
| 31        | 493         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 32         | 500         |
| 33         | 504         |
| 34         | 510         |
| 35         | 515         |
| 36         | 520         |
| 37         | 525         |
| 38         | 530         |
| 39         | 536         |
| 40         | 541         |
| 41         | 546         |
| 42         | 551         |
| 43         | 556         |
| 44         | 561         |
| 45         | 566         |
| 46         | 571         |
| 47         | 576         |
| 48         | 581         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 49        | 586         |
| 50        | 591         |
| 51        | 597         |
| 52        | 602         |
| 53        | 607         |
| 54        | 613         |
| 55        | 618         |
| 56        | 624         |
| 57        | 630         |
| 58        | 635         |
| 59        | 641         |
| 60        | 648         |
| 61        | 654         |
| 62        | 660         |
| 63        | 667         |
| 64        | 674         |
| 65        | 681         |
| 66        | 689         |
| 67        | 697         |
| 68        | 705         |
| 69        | 714         |
| 70        | 724         |
| 71        | 734         |
| 72        | 746         |
| 73        | 758         |
| 74        | 773         |
| 75        | 790         |
| 76        | 810         |
| 77        | 837         |
| 78        | 873         |
| 79        | 936         |
| 80        | 966         |

## 2007 Grade 3 Benchmark Examination Raw to Scale Score Conversion Tables for Literacy

| BELOW BASIC |             |           |             |
|-------------|-------------|-----------|-------------|
| Raw Score   | Scale Score | Raw Score | Scale Score |
| 0.0         | 33          | 24.0      | 168         |
| 0.5         | 38          | 24.5      | 172         |
| 1.0         | 40          | 25.0      | 175         |
| 1.5         | 42          | 25.5      | 179         |
| 2.0         | 44          | 26.0      | 182         |
| 2.5         | 45          | 26.5      | 185         |
| 3.0         | 46          | 27.0      | 189         |
| 3.5         | 47          | 27.5      | 192         |
| 4.0         | 48          | 28.0      | 196         |
| 4.5         | 49          | 28.5      | 199         |
| 5.0         | 49          | 29.0      | 202         |
| 5.5         | 50          | 29.5      | 206         |
| 6.0         | 50          | 30.0      | 209         |
| 6.5         | 51          | 30.5      | 212         |
| 7.0         | 51          | 31.0      | 215         |
| 7.5         | 52          | 31.5      | 219         |
| 8.0         | 52          | 32.0      | 222         |
| 8.5         | 53          | 32.5      | 225         |
| 9.0         | 53          | 33.0      | 229         |
| 9.5         | 53          | 33.5      | 232         |
| 10.0        | 54          | 34.0      | 235         |
| 10.5        | 54          | 34.5      | 239         |
| 11.0        | 54          | 35.0      | 242         |
| 11.5        | 57          | 35.5      | 245         |
| 12.0        | 63          | 36.0      | 249         |
| 12.5        | 69          | 36.5      | 252         |
| 13.0        | 75          | 37.0      | 255         |
| 13.5        | 80          | 37.5      | 259         |
| 14.0        | 85          | 38.0      | 262         |
| 14.5        | 90          | 38.5      | 266         |
| 15.0        | 95          | 39.0      | 269         |
| 15.5        | 100         | 39.5      | 272         |
| 16.0        | 105         | 40.0      | 276         |
| 16.5        | 109         | 40.5      | 279         |
| 17.0        | 114         | 41.0      | 283         |
| 17.5        | 118         | 41.5      | 287         |
| 18.0        | 122         | 42.0      | 290         |
| 18.5        | 127         | 42.5      | 294         |
| 19.0        | 131         | 43.0      | 297         |
| 19.5        | 135         | 43.5      | 301         |
| 20.0        | 139         | 44.0      | 305         |
| 20.5        | 142         | 44.5      | 308         |
| 21.0        | 146         | 45.0      | 312         |
| 21.5        | 150         | 45.5      | 316         |
| 22.0        | 154         | 46.0      | 320         |
| 22.5        | 157         | 46.5      | 323         |
| 23.0        | 161         | 47.0      | 327         |
| 23.5        | 165         |           |             |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 47.5      | 332         |
| 48.0      | 338         |
| 48.5      | 344         |
| 49.0      | 349         |
| 49.5      | 355         |
| 50.0      | 361         |
| 50.5      | 368         |
| 51.0      | 374         |
| 51.5      | 380         |
| 52.0      | 386         |
| 52.5      | 392         |
| 53.0      | 399         |
| 53.5      | 405         |
| 54.0      | 411         |
| 54.5      | 418         |
| 55.0      | 424         |
| 55.5      | 431         |
| 56.0      | 437         |
| 56.5      | 444         |
| 57.0      | 451         |
| 57.5      | 457         |
| 58.0      | 464         |
| 58.5      | 471         |
| 59.0      | 478         |
| 59.5      | 484         |
| 60.0      | 491         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 60.5       | 500         |
| 61.0       | 504         |
| 61.5       | 509         |
| 62.0       | 515         |
| 62.5       | 520         |
| 63.0       | 525         |
| 63.5       | 531         |
| 64.0       | 536         |
| 64.5       | 542         |
| 65.0       | 547         |
| 65.5       | 553         |
| 66.0       | 559         |
| 66.5       | 564         |
| 67.0       | 570         |
| 67.5       | 576         |
| 68.0       | 581         |
| 68.5       | 587         |
| 69.0       | 593         |
| 69.5       | 599         |
| 70.0       | 604         |
| 70.5       | 610         |
| 71.0       | 616         |
| 71.5       | 622         |
| 72.0       | 628         |
| 72.5       | 634         |
| 73.0       | 640         |
| 73.5       | 646         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 74.0      | 654         |
| 74.5      | 659         |
| 75.0      | 665         |
| 75.5      | 671         |
| 76.0      | 678         |
| 76.5      | 684         |
| 77.0      | 691         |
| 77.5      | 698         |
| 78.0      | 705         |
| 78.5      | 712         |
| 79.0      | 719         |
| 79.5      | 726         |
| 80.0      | 733         |
| 80.5      | 741         |
| 81.0      | 748         |
| 81.5      | 756         |
| 82.0      | 764         |
| 82.5      | 772         |
| 83.0      | 781         |
| 83.5      | 789         |
| 84.0      | 798         |
| 84.5      | 808         |
| 85.0      | 817         |
| 85.5      | 827         |
| 86.0      | 837         |
| 86.5      | 848         |
| 87.0      | 860         |
| 87.5      | 871         |
| 88.0      | 884         |
| 88.5      | 897         |
| 89.0      | 911         |
| 89.5      | 926         |
| 90.0      | 942         |
| 90.5      | 956         |
| 91.0      | 957         |
| 91.5      | 958         |
| 92.0      | 959         |
| 92.5      | 960         |
| 93.0      | 961         |
| 93.5      | 962         |
| 94.0      | 964         |
| 94.5      | 966         |
| 95.0      | 969         |
| 95.5      | 974         |
| 96.0      | 983         |

## 2007 Grade 4 Benchmark Examination Raw to Scale Score Conversion Tables for Mathematics

| BELOW BASIC |             |
|-------------|-------------|
| Raw Score   | Scale Score |
| 0           | 61          |
| 1           | 158         |
| 2           | 223         |
| 3           | 262         |
| 4           | 290         |
| 5           | 312         |
| 6           | 331         |
| 7           | 347         |
| 8           | 360         |
| 9           | 373         |
| 10          | 384         |
| 11          | 395         |
| 12          | 404         |
| 13          | 413         |
| 14          | 422         |
| 15          | 430         |
| 16          | 437         |
| 17          | 445         |
| 18          | 452         |
| 19          | 458         |
| 20          | 465         |
| 21          | 471         |
| 22          | 477         |
| 23          | 482         |
| 24          | 488         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 25        | 495         |
| 26        | 499         |
| 27        | 504         |
| 28        | 509         |
| 29        | 514         |
| 30        | 519         |
| 31        | 524         |
| 32        | 528         |
| 33        | 533         |
| 34        | 538         |
| 35        | 542         |
| 36        | 547         |
| 37        | 551         |
| 38        | 556         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 39         | 559         |
| 40         | 565         |
| 41         | 569         |
| 42         | 574         |
| 43         | 579         |
| 44         | 583         |
| 45         | 588         |
| 46         | 592         |
| 47         | 597         |
| 48         | 602         |
| 49         | 607         |
| 50         | 612         |
| 51         | 617         |
| 52         | 622         |
| 53         | 627         |
| 54         | 632         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 55        | 640         |
| 56        | 643         |
| 57        | 649         |
| 58        | 655         |
| 59        | 661         |
| 60        | 668         |
| 61        | 674         |
| 62        | 681         |
| 63        | 689         |
| 64        | 697         |
| 65        | 705         |
| 66        | 714         |
| 67        | 723         |
| 68        | 733         |
| 69        | 745         |
| 70        | 757         |
| 71        | 771         |
| 72        | 786         |
| 73        | 804         |
| 74        | 825         |
| 75        | 851         |
| 76        | 883         |
| 77        | 927         |
| 78        | 960         |
| 79        | 974         |

## 2007 Grade 4 Benchmark Examination Raw to Scale Score Conversion Tables for Literacy

| BELOW BASIC |             |  |  |
|-------------|-------------|--|--|
| Raw Score   | Scale Score |  |  |
| 0.0         | 31          |  |  |
| 0.5         | 36          |  |  |
| 1.0         | 39          |  |  |
| 1.5         | 41          |  |  |
| 2.0         | 42          |  |  |
| 2.5         | 43          |  |  |
| 3.0         | 44          |  |  |
| 3.5         | 45          |  |  |
| 4.0         | 46          |  |  |
| 4.5         | 47          |  |  |
| 5.0         | 48          |  |  |
| 5.5         | 48          |  |  |
| 6.0         | 49          |  |  |
| 6.5         | 49          |  |  |
| 7.0         | 50          |  |  |
| 7.5         | 50          |  |  |
| 8.0         | 51          |  |  |
| 8.5         | 51          |  |  |
| 9.0         | 51          |  |  |
| 9.5         | 52          |  |  |
| 10.0        | 52          |  |  |
| 10.5        | 53          |  |  |
| 11.0        | 53          |  |  |
| 11.5        | 53          |  |  |
| 12.0        | 54          |  |  |
| 12.5        | 54          |  |  |
| 13.0        | 54          |  |  |
| 13.5        | 58          |  |  |
| 14.0        | 65          |  |  |
| 14.5        | 73          |  |  |
| 15.0        | 79          |  |  |
| 15.5        | 86          |  |  |
| 16.0        | 93          |  |  |
| 16.5        | 99          |  |  |
| 17.0        | 105         |  |  |
| 17.5        | 112         |  |  |
| 18.0        | 118         |  |  |
| 18.5        | 124         |  |  |
| 19.0        | 130         |  |  |
| 19.5        | 135         |  |  |
| 20.0        | 141         |  |  |

| Raw Score | Scale Score |
|-----------|-------------|
| 20.5      | 147         |
| 21.0      | 153         |
| 21.5      | 158         |
| 22.0      | 164         |
| 22.5      | 169         |
| 23.0      | 174         |
| 23.5      | 180         |
| 24.0      | 185         |
| 24.5      | 190         |
| 25.0      | 196         |
| 25.5      | 201         |
| 26.0      | 206         |
| 26.5      | 211         |
| 27.0      | 216         |
| 27.5      | 221         |
| 28.0      | 227         |
| 28.5      | 232         |
| 29.0      | 237         |
| 29.5      | 242         |
| 30.0      | 247         |
| 30.5      | 252         |
| 31.0      | 257         |
| 31.5      | 262         |
| 32.0      | 267         |
| 32.5      | 272         |
| 33.0      | 277         |
| 33.5      | 282         |
| 34.0      | 286         |
| 34.5      | 291         |
| 35.0      | 296         |
| 35.5      | 301         |
| 36.0      | 306         |
| 36.5      | 311         |
| 37.0      | 316         |
| 37.5      | 321         |
| 38.0      | 326         |
| 38.5      | 331         |
| 39.0      | 336         |
| 39.5      | 341         |
| 40.0      | 346         |
| 40.5      | 351         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 41.0      | 356         |
| 41.5      | 360         |
| 42.0      | 365         |
| 42.5      | 370         |
| 43.0      | 375         |
| 43.5      | 380         |
| 44.0      | 385         |
| 44.5      | 390         |
| 45.0      | 395         |
| 45.5      | 400         |
| 46.0      | 405         |
| 46.5      | 410         |
| 47.0      | 415         |
| 47.5      | 420         |
| 48.0      | 425         |
| 48.5      | 430         |
| 49.0      | 435         |
| 49.5      | 440         |
| 50.0      | 445         |
| 50.5      | 450         |
| 51.0      | 455         |
| 51.5      | 460         |
| 52.0      | 465         |
| 52.5      | 470         |
| 53.0      | 475         |
| 53.5      | 480         |
| 54.0      | 485         |
| 54.5      | 490         |
| 55.0      | 495         |
| 55.5      | 500         |
| 56.0      | 505         |
| 56.5      | 510         |
| 57.0      | 515         |
| 57.5      | 520         |
| 58.0      | 526         |
| 58.5      | 531         |
| 59.0      | 536         |
| 59.5      | 541         |
| 60.0      | 546         |
| 60.5      | 551         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 61.0       | 559         |
| 61.5       | 562         |
| 62.0       | 567         |
| 62.5       | 573         |
| 63.0       | 578         |
| 63.5       | 583         |
| 64.0       | 589         |
| 64.5       | 594         |
| 65.0       | 600         |
| 65.5       | 605         |
| 66.0       | 611         |
| 66.5       | 616         |
| 67.0       | 622         |
| 67.5       | 627         |
| 68.0       | 633         |
| 68.5       | 639         |
| 69.0       | 645         |
| 69.5       | 650         |
| 70.0       | 656         |
| 70.5       | 662         |
| 71.0       | 668         |
| 71.5       | 674         |
| 72.0       | 681         |
| 72.5       | 687         |
| 73.0       | 693         |
| 73.5       | 699         |
| 74.0       | 706         |
| 74.5       | 712         |
| 75.0       | 719         |
| 75.5       | 726         |
| 76.0       | 732         |
| 76.5       | 739         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 77.0      | 748         |
| 77.5      | 753         |
| 78.0      | 761         |
| 78.5      | 768         |
| 79.0      | 775         |
| 79.5      | 783         |
| 80.0      | 791         |
| 80.5      | 799         |
| 81.0      | 807         |
| 81.5      | 815         |
| 82.0      | 824         |
| 82.5      | 832         |
| 83.0      | 841         |
| 83.5      | 850         |
| 84.0      | 860         |
| 84.5      | 870         |
| 85.0      | 880         |
| 85.5      | 890         |
| 86.0      | 901         |
| 86.5      | 912         |
| 87.0      | 924         |
| 87.5      | 936         |
| 88.0      | 949         |
| 88.5      | 956         |
| 89.0      | 957         |
| 89.5      | 957         |
| 90.0      | 958         |
| 90.5      | 959         |
| 91.0      | 960         |
| 91.5      | 960         |
| 92.0      | 961         |
| 92.5      | 962         |
| 93.0      | 964         |
| 93.5      | 965         |
| 94.0      | 967         |
| 94.5      | 969         |
| 95.0      | 972         |
| 95.5      | 977         |
| 96.0      | 986         |

## 2007 Grade 5 Benchmark Examination Raw to Scale Score Conversion Tables for Mathematics

| BELOW BASIC |             |
|-------------|-------------|
| Raw Score   | Scale Score |
| 0           | 67          |
| 1           | 172         |
| 2           | 237         |
| 3           | 276         |
| 4           | 305         |
| 5           | 328         |
| 6           | 346         |
| 7           | 363         |
| 8           | 377         |
| 9           | 390         |
| 10          | 402         |
| 11          | 413         |
| 12          | 424         |
| 13          | 433         |
| 14          | 442         |
| 15          | 451         |
| 16          | 459         |
| 17          | 467         |
| 18          | 475         |
| 19          | 482         |
| 20          | 489         |
| 21          | 495         |
| 22          | 502         |
| 23          | 508         |
| 24          | 514         |
| 25          | 520         |
| 26          | 526         |
| 27          | 532         |
| 28          | 537         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 29        | 544         |
| 30        | 548         |
| 31        | 553         |
| 32        | 558         |
| 33        | 563         |
| 34        | 568         |
| 35        | 573         |
| 36        | 578         |
| 37        | 582         |
| 38        | 587         |
| 39        | 592         |
| 40        | 596         |
| 41        | 601         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 42         | 604         |
| 43         | 610         |
| 44         | 615         |
| 45         | 619         |
| 46         | 624         |
| 47         | 628         |
| 48         | 633         |
| 49         | 638         |
| 50         | 642         |
| 51         | 647         |
| 52         | 652         |
| 53         | 657         |
| 54         | 662         |
| 55         | 667         |
| 56         | 672         |
| 57         | 678         |
| 58         | 683         |
| 59         | 689         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 60        | 697         |
| 61        | 700         |
| 62        | 707         |
| 63        | 713         |
| 64        | 720         |
| 65        | 727         |
| 66        | 734         |
| 67        | 742         |
| 68        | 751         |
| 69        | 759         |
| 70        | 769         |
| 71        | 780         |
| 72        | 791         |
| 73        | 804         |
| 74        | 819         |
| 75        | 837         |
| 76        | 858         |
| 77        | 885         |
| 78        | 923         |
| 79        | 959         |
| 80        | 973         |

## 2007 Grade 5 Benchmark Examination Raw to Scale Score Conversion Tables for Literacy

| BELOW BASIC |             |           |             |
|-------------|-------------|-----------|-------------|
| Raw Score   | Scale Score | Raw Score | Scale Score |
| 0.0         | 32          | 22.0      | 198         |
| 0.5         | 37          | 22.5      | 202         |
| 1.0         | 40          | 23.0      | 207         |
| 1.5         | 42          | 23.5      | 212         |
| 2.0         | 44          | 24.0      | 216         |
| 2.5         | 45          | 24.5      | 221         |
| 3.0         | 46          | 25.0      | 225         |
| 3.5         | 47          | 25.5      | 230         |
| 4.0         | 48          | 26.0      | 234         |
| 4.5         | 49          | 26.5      | 239         |
| 5.0         | 49          | 27.0      | 243         |
| 5.5         | 50          | 27.5      | 247         |
| 6.0         | 50          | 28.0      | 251         |
| 6.5         | 51          | 28.5      | 256         |
| 7.0         | 52          | 29.0      | 260         |
| 7.5         | 52          | 29.5      | 264         |
| 8.0         | 52          | 30.0      | 268         |
| 8.5         | 53          | 30.5      | 272         |
| 9.0         | 53          | 31.0      | 277         |
| 9.5         | 54          | 31.5      | 281         |
| 10.0        | 54          | 32.0      | 285         |
| 10.5        | 54          | 32.5      | 289         |
| 11.0        | 62          | 33.0      | 293         |
| 11.5        | 71          | 33.5      | 297         |
| 12.0        | 79          | 34.0      | 301         |
| 12.5        | 86          | 34.5      | 305         |
| 13.0        | 94          | 35.0      | 309         |
| 13.5        | 101         | 35.5      | 313         |
| 14.0        | 108         | 36.0      | 317         |
| 14.5        | 114         | 36.5      | 322         |
| 15.0        | 121         | 37.0      | 326         |
| 15.5        | 127         | 37.5      | 330         |
| 16.0        | 133         | 38.0      | 334         |
| 16.5        | 139         | 38.5      | 338         |
| 17.0        | 145         | 39.0      | 342         |
| 17.5        | 151         | 39.5      | 346         |
| 18.0        | 156         | 40.0      | 350         |
| 18.5        | 162         | 40.5      | 354         |
| 19.0        | 167         | 41.0      | 359         |
| 19.5        | 172         | 41.5      | 363         |
| 20.0        | 178         | 42.0      | 367         |
| 20.5        | 183         | 42.5      | 371         |
| 21.0        | 188         | 43.0      | 375         |
| 21.5        | 193         |           |             |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 43.5      | 382         |
| 44.0      | 384         |
| 44.5      | 388         |
| 45.0      | 393         |
| 45.5      | 397         |
| 46.0      | 401         |
| 46.5      | 406         |
| 47.0      | 410         |
| 47.5      | 414         |
| 48.0      | 419         |
| 48.5      | 423         |
| 49.0      | 428         |
| 49.5      | 432         |
| 50.0      | 437         |
| 50.5      | 442         |
| 51.0      | 446         |
| 51.5      | 451         |
| 52.0      | 456         |
| 52.5      | 460         |
| 53.0      | 465         |
| 53.5      | 470         |
| 54.0      | 475         |
| 54.5      | 480         |
| 55.0      | 485         |
| 55.5      | 489         |
| 56.0      | 494         |
| 56.5      | 499         |
| 57.0      | 504         |
| 57.5      | 509         |
| 58.0      | 515         |
| 58.5      | 520         |
| 59.0      | 525         |
| 59.5      | 530         |
| 60.0      | 535         |
| 60.5      | 541         |
| 61.0      | 546         |
| 61.5      | 551         |
| 62.0      | 557         |
| 62.5      | 562         |
| 63.0      | 567         |
| 63.5      | 573         |
| 64.0      | 578         |
| 64.5      | 584         |
| 65.0      | 590         |
| 65.5      | 595         |
| 66.0      | 601         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 66.5       | 604         |
| 67.0       | 613         |
| 67.5       | 618         |
| 68.0       | 624         |
| 68.5       | 630         |
| 69.0       | 636         |
| 69.5       | 642         |
| 70.0       | 648         |
| 70.5       | 654         |
| 71.0       | 661         |
| 71.5       | 667         |
| 72.0       | 673         |
| 72.5       | 680         |
| 73.0       | 686         |
| 73.5       | 692         |
| 74.0       | 699         |
| 74.5       | 706         |
| 75.0       | 712         |
| 75.5       | 719         |
| 76.0       | 726         |
| 76.5       | 733         |
| 77.0       | 740         |
| 77.5       | 748         |
| 78.0       | 755         |
| 78.5       | 762         |
| 79.0       | 770         |
| 79.5       | 778         |
| 80.0       | 785         |
| 80.5       | 793         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 81.0      | 799         |
| 81.5      | 810         |
| 82.0      | 818         |
| 82.5      | 827         |
| 83.0      | 836         |
| 83.5      | 845         |
| 84.0      | 854         |
| 84.5      | 864         |
| 85.0      | 874         |
| 85.5      | 885         |
| 86.0      | 895         |
| 86.5      | 906         |
| 87.0      | 918         |
| 87.5      | 930         |
| 88.0      | 943         |
| 88.5      | 956         |
| 89.0      | 957         |
| 89.5      | 957         |
| 90.0      | 958         |
| 90.5      | 959         |
| 91.0      | 959         |
| 91.5      | 960         |
| 92.0      | 961         |
| 92.5      | 962         |
| 93.0      | 963         |
| 93.5      | 965         |
| 94.0      | 966         |
| 94.5      | 969         |
| 95.0      | 972         |
| 95.5      | 977         |
| 96.0      | 985         |

## 2007 Grade 6 Benchmark Examination Raw to Scale Score Conversion Tables for Mathematics

| BELOW BASIC |             |
|-------------|-------------|
| Raw Score   | Scale Score |
| 0           | 116         |
| 1           | 229         |
| 2           | 296         |
| 3           | 337         |
| 4           | 367         |
| 5           | 391         |
| 6           | 411         |
| 7           | 428         |
| 8           | 444         |
| 9           | 457         |
| 10          | 469         |
| 11          | 481         |
| 12          | 491         |
| 13          | 501         |
| 14          | 510         |
| 15          | 519         |
| 16          | 527         |
| 17          | 535         |
| 18          | 542         |
| 19          | 549         |
| 20          | 556         |
| 21          | 563         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 22        | 569         |
| 23        | 576         |
| 24        | 582         |
| 25        | 588         |
| 26        | 594         |
| 27        | 599         |
| 28        | 605         |
| 29        | 610         |
| 30        | 615         |
| 31        | 621         |
| 32        | 626         |
| 33        | 631         |
| 34        | 636         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 35         | 641         |
| 36         | 645         |
| 37         | 650         |
| 38         | 654         |
| 39         | 659         |
| 40         | 664         |
| 41         | 668         |
| 42         | 672         |
| 43         | 677         |
| 44         | 681         |
| 45         | 686         |
| 46         | 690         |
| 47         | 695         |
| 48         | 699         |
| 49         | 704         |
| 50         | 708         |
| 51         | 713         |
| 52         | 718         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 53        | 722         |
| 54        | 727         |
| 55        | 732         |
| 56        | 738         |
| 57        | 743         |
| 58        | 748         |
| 59        | 754         |
| 60        | 760         |
| 61        | 766         |
| 62        | 772         |
| 63        | 779         |
| 64        | 786         |
| 65        | 793         |
| 66        | 800         |
| 67        | 808         |
| 68        | 816         |
| 69        | 825         |
| 70        | 835         |
| 71        | 845         |
| 72        | 856         |
| 73        | 868         |
| 74        | 882         |
| 75        | 899         |
| 76        | 918         |
| 77        | 944         |
| 78        | 958         |
| 79        | 966         |
| 80        | 979         |

## 2007 Grade 6 Benchmark Examination Raw to Scale Score Conversion Tables for Literacy

| BELOW BASIC |             |  |  |
|-------------|-------------|--|--|
| Raw Score   | Scale Score |  |  |
| 0.0         | 30          |  |  |
| 0.5         | 35          |  |  |
| 1.0         | 38          |  |  |
| 1.5         | 40          |  |  |
| 2.0         | 42          |  |  |
| 2.5         | 43          |  |  |
| 3.0         | 44          |  |  |
| 3.5         | 45          |  |  |
| 4.0         | 46          |  |  |
| 4.5         | 47          |  |  |
| 5.0         | 47          |  |  |
| 5.5         | 48          |  |  |
| 6.0         | 49          |  |  |
| 6.5         | 49          |  |  |
| 7.0         | 50          |  |  |
| 7.5         | 50          |  |  |
| 8.0         | 51          |  |  |
| 8.5         | 51          |  |  |
| 9.0         | 52          |  |  |
| 9.5         | 52          |  |  |
| 10.0        | 52          |  |  |
| 10.5        | 53          |  |  |
| 11.0        | 53          |  |  |
| 11.5        | 53          |  |  |
| 12.0        | 54          |  |  |
| 12.5        | 54          |  |  |
| 13.0        | 57          |  |  |
| 13.5        | 65          |  |  |
| 14.0        | 72          |  |  |
| 14.5        | 80          |  |  |
| 15.0        | 87          |  |  |
| 15.5        | 94          |  |  |
| 16.0        | 101         |  |  |
| 16.5        | 108         |  |  |
| 17.0        | 115         |  |  |
| 17.5        | 121         |  |  |
| 18.0        | 128         |  |  |
| 18.5        | 134         |  |  |
| 19.0        | 140         |  |  |
| 19.5        | 146         |  |  |
| 20.0        | 152         |  |  |
| 20.5        | 158         |  |  |
| 21.0        | 164         |  |  |
| 21.5        | 170         |  |  |
| 22.0        | 176         |  |  |
| 22.5        | 181         |  |  |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 46.0      | 419         |
| 46.5      | 424         |
| 47.0      | 428         |
| 47.5      | 433         |
| 48.0      | 439         |
| 48.5      | 444         |
| 49.0      | 449         |
| 49.5      | 454         |
| 50.0      | 459         |
| 50.5      | 464         |
| 51.0      | 469         |
| 51.5      | 474         |
| 52.0      | 479         |
| 52.5      | 484         |
| 53.0      | 490         |
| 53.5      | 495         |
| 54.0      | 500         |
| 54.5      | 505         |
| 55.0      | 510         |
| 55.5      | 516         |
| 56.0      | 521         |
| 56.5      | 526         |
| 57.0      | 532         |
| 57.5      | 537         |
| 58.0      | 542         |
| 58.5      | 548         |
| 59.0      | 553         |
| 59.5      | 559         |
| 60.0      | 564         |
| 60.5      | 570         |
| 61.0      | 575         |
| 61.5      | 581         |
| 62.0      | 587         |
| 62.5      | 592         |
| 63.0      | 598         |
| 63.5      | 604         |
| 64.0      | 609         |
| 64.5      | 615         |
| 65.0      | 621         |
| 65.5      | 627         |
| 66.0      | 633         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 66.5       | 641         |
| 67.0       | 645         |
| 67.5       | 651         |
| 68.0       | 657         |
| 68.5       | 663         |
| 69.0       | 669         |
| 69.5       | 675         |
| 70.0       | 681         |
| 70.5       | 687         |
| 71.0       | 694         |
| 71.5       | 700         |
| 72.0       | 707         |
| 72.5       | 713         |
| 73.0       | 720         |
| 73.5       | 726         |
| 74.0       | 733         |
| 74.5       | 740         |
| 75.0       | 747         |
| 75.5       | 754         |
| 76.0       | 761         |
| 76.5       | 768         |
| 77.0       | 775         |
| 77.5       | 782         |
| 78.0       | 790         |
| 78.5       | 797         |
| 79.0       | 805         |
| 79.5       | 813         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 80.0      | 823         |
| 80.5      | 829         |
| 81.0      | 837         |
| 81.5      | 846         |
| 82.0      | 855         |
| 82.5      | 863         |
| 83.0      | 873         |
| 83.5      | 882         |
| 84.0      | 892         |
| 84.5      | 902         |
| 85.0      | 912         |
| 85.5      | 923         |
| 86.0      | 934         |
| 86.5      | 946         |
| 87.0      | 956         |
| 87.5      | 957         |
| 88.0      | 957         |
| 88.5      | 958         |
| 89.0      | 958         |
| 89.5      | 959         |
| 90.0      | 960         |
| 90.5      | 960         |
| 91.0      | 961         |
| 91.5      | 962         |
| 92.0      | 963         |
| 92.5      | 964         |
| 93.0      | 965         |
| 93.5      | 967         |
| 94.0      | 968         |
| 94.5      | 971         |
| 95.0      | 974         |
| 95.5      | 979         |
| 96.0      | 988         |

## 2007 Grade 7 Benchmark Examination Raw to Scale Score Conversion Tables for Mathematics

| BELOW BASIC |             |
|-------------|-------------|
| Raw Score   | Scale Score |
| 0           | 106         |
| 1           | 159         |
| 2           | 321         |
| 3           | 361         |
| 4           | 391         |
| 5           | 414         |
| 6           | 434         |
| 7           | 451         |
| 8           | 465         |
| 9           | 479         |
| 10          | 491         |
| 11          | 502         |
| 12          | 513         |
| 13          | 522         |
| 14          | 531         |
| 15          | 540         |
| 16          | 548         |
| 17          | 556         |
| 18          | 564         |
| 19          | 571         |
| 20          | 578         |
| 21          | 585         |
| 22          | 592         |
| 23          | 598         |
| 24          | 604         |
| 25          | 610         |
| 26          | 616         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 27        | 622         |
| 28        | 628         |
| 29        | 634         |
| 30        | 640         |
| 31        | 645         |
| 32        | 651         |
| 33        | 656         |
| 34        | 661         |
| 35        | 667         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 36         | 673         |
| 37         | 677         |
| 38         | 683         |
| 39         | 688         |
| 40         | 693         |
| 41         | 699         |
| 42         | 704         |
| 43         | 709         |
| 44         | 714         |
| 45         | 720         |
| 46         | 725         |
| 47         | 730         |
| 48         | 736         |
| 49         | 741         |
| 50         | 747         |
| 51         | 752         |
| 52         | 758         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 53        | 764         |
| 54        | 769         |
| 55        | 775         |
| 56        | 781         |
| 57        | 787         |
| 58        | 793         |
| 59        | 800         |
| 60        | 806         |
| 61        | 813         |
| 62        | 820         |
| 63        | 827         |
| 64        | 834         |
| 65        | 842         |
| 66        | 850         |
| 67        | 859         |
| 68        | 868         |
| 69        | 878         |
| 70        | 889         |
| 71        | 901         |
| 72        | 915         |
| 73        | 930         |
| 74        | 948         |
| 75        | 957         |
| 76        | 960         |
| 77        | 964         |
| 78        | 969         |
| 79        | 977         |
| 80        | 991         |

## 2007 Grade 7 Benchmark Examination Raw to Scale Score Conversion Tables for Literacy

| BELOW BASIC |             |  |  |
|-------------|-------------|--|--|
| Raw Score   | Scale Score |  |  |
| 0.0         | 35          |  |  |
| 0.5         | 40          |  |  |
| 1.0         | 43          |  |  |
| 1.5         | 45          |  |  |
| 2.0         | 46          |  |  |
| 2.5         | 48          |  |  |
| 3.0         | 49          |  |  |
| 3.5         | 50          |  |  |
| 4.0         | 50          |  |  |
| 4.5         | 51          |  |  |
| 5.0         | 52          |  |  |
| 5.5         | 52          |  |  |
| 6.0         | 53          |  |  |
| 6.5         | 53          |  |  |
| 7.0         | 54          |  |  |
| 7.5         | 54          |  |  |
| 8.0         | 63          |  |  |
| 8.5         | 73          |  |  |
| 9.0         | 83          |  |  |
| 9.5         | 93          |  |  |
| 10.0        | 102         |  |  |
| 10.5        | 110         |  |  |
| 11.0        | 119         |  |  |
| 11.5        | 127         |  |  |
| 12.0        | 134         |  |  |
| 12.5        | 142         |  |  |
| 13.0        | 149         |  |  |
| 13.5        | 156         |  |  |
| 14.0        | 163         |  |  |
| 14.5        | 170         |  |  |
| 15.0        | 176         |  |  |
| 15.5        | 183         |  |  |
| 16.0        | 189         |  |  |
| 16.5        | 195         |  |  |
| 17.0        | 201         |  |  |
| 17.5        | 207         |  |  |
| 18.0        | 213         |  |  |
| 18.5        | 218         |  |  |
| 19.0        | 224         |  |  |

| Raw Score | Scale Score |
|-----------|-------------|
| 19.5      | 229         |
| 20.0      | 235         |
| 20.5      | 240         |
| 21.0      | 246         |
| 21.5      | 251         |
| 22.0      | 256         |
| 22.5      | 262         |
| 23.0      | 267         |
| 23.5      | 272         |
| 24.0      | 277         |
| 24.5      | 282         |
| 25.0      | 288         |
| 25.5      | 293         |
| 26.0      | 298         |
| 26.5      | 303         |
| 27.0      | 308         |
| 27.5      | 313         |
| 28.0      | 318         |
| 28.5      | 323         |
| 29.0      | 328         |
| 29.5      | 333         |
| 30.0      | 338         |
| 30.5      | 344         |
| 31.0      | 349         |
| 31.5      | 354         |
| 32.0      | 359         |
| 32.5      | 364         |
| 33.0      | 369         |
| 33.5      | 374         |
| 34.0      | 379         |
| 34.5      | 385         |
| 35.0      | 390         |
| 35.5      | 395         |
| 36.0      | 400         |
| 36.5      | 405         |
| 37.0      | 411         |
| 37.5      | 416         |
| 38.0      | 421         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 38.5      | 426         |
| 39.0      | 431         |
| 39.5      | 437         |
| 40.0      | 442         |
| 40.5      | 447         |
| 41.0      | 452         |
| 41.5      | 458         |
| 42.0      | 463         |
| 42.5      | 468         |
| 43.0      | 473         |
| 43.5      | 479         |
| 44.0      | 484         |
| 44.5      | 489         |
| 45.0      | 494         |
| 45.5      | 499         |
| 46.0      | 505         |
| 46.5      | 510         |
| 47.0      | 515         |
| 47.5      | 520         |
| 48.0      | 525         |
| 48.5      | 530         |
| 49.0      | 535         |
| 49.5      | 540         |
| 50.0      | 546         |
| 50.5      | 551         |
| 51.0      | 556         |
| 51.5      | 561         |
| 52.0      | 566         |
| 52.5      | 571         |
| 53.0      | 576         |
| 53.5      | 581         |
| 54.0      | 586         |
| 54.5      | 591         |
| 55.0      | 596         |
| 55.5      | 601         |
| 56.0      | 605         |
| 56.5      | 610         |
| 57.0      | 615         |
| 57.5      | 620         |
| 58.0      | 625         |
| 58.5      | 630         |
| 59.0      | 635         |
| 59.5      | 640         |
| 60.0      | 645         |
| 60.5      | 649         |
| 61.0      | 654         |
| 61.5      | 659         |
| 62.0      | 664         |
| 62.5      | 669         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 63.0       | 673         |
| 63.5       | 679         |
| 64.0       | 684         |
| 64.5       | 689         |
| 65.0       | 694         |
| 65.5       | 699         |
| 66.0       | 704         |
| 66.5       | 709         |
| 67.0       | 714         |
| 67.5       | 719         |
| 68.0       | 724         |
| 68.5       | 729         |
| 69.0       | 734         |
| 69.5       | 739         |
| 70.0       | 744         |
| 70.5       | 750         |
| 71.0       | 755         |
| 71.5       | 761         |
| 72.0       | 766         |
| 72.5       | 772         |
| 73.0       | 777         |
| 73.5       | 783         |
| 74.0       | 789         |
| 74.5       | 795         |
| 75.0       | 801         |
| 75.5       | 807         |
| 76.0       | 813         |
| 76.5       | 819         |
| 77.0       | 826         |
| 77.5       | 832         |
| 78.0       | 839         |
| 78.5       | 846         |
| 79.0       | 853         |
| 79.5       | 860         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 80.0      | 867         |
| 80.5      | 875         |
| 81.0      | 883         |
| 81.5      | 891         |
| 82.0      | 899         |
| 82.5      | 908         |
| 83.0      | 916         |
| 83.5      | 926         |
| 84.0      | 935         |
| 84.5      | 945         |
| 85.0      | 955         |
| 85.5      | 956         |
| 86.0      | 957         |
| 86.5      | 957         |
| 87.0      | 958         |
| 87.5      | 958         |
| 88.0      | 959         |
| 88.5      | 959         |
| 89.0      | 960         |
| 89.5      | 961         |
| 90.0      | 961         |
| 90.5      | 962         |
| 91.0      | 963         |
| 91.5      | 964         |
| 92.0      | 965         |
| 92.5      | 966         |
| 93.0      | 967         |
| 93.5      | 969         |
| 94.0      | 971         |
| 94.5      | 973         |
| 95.0      | 976         |
| 95.5      | 981         |
| 96.0      | 990         |

## 2007 Grade 8 Benchmark Examination Raw to Scale Score Conversion Tables for Mathematics

| BELOW BASIC |             |
|-------------|-------------|
| Raw Score   | Scale Score |
| 0           | 186         |
| 1           | 298         |
| 2           | 364         |
| 3           | 404         |
| 4           | 433         |
| 5           | 456         |
| 6           | 475         |
| 7           | 492         |
| 8           | 507         |
| 9           | 521         |
| 10          | 533         |
| 11          | 544         |
| 12          | 555         |
| 13          | 565         |
| 14          | 575         |
| 15          | 584         |
| 16          | 592         |
| 17          | 600         |
| 18          | 608         |
| 19          | 616         |
| 20          | 623         |
| 21          | 630         |
| 22          | 637         |
| 23          | 643         |
| 24          | 650         |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 25        | 656         |
| 26        | 662         |
| 27        | 668         |
| 28        | 674         |
| 29        | 680         |
| 30        | 685         |
| 31        | 691         |
| 32        | 696         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 33         | 700         |
| 34         | 707         |
| 35         | 712         |
| 36         | 717         |
| 37         | 723         |
| 38         | 728         |
| 39         | 733         |
| 40         | 738         |
| 41         | 743         |
| 42         | 748         |
| 43         | 753         |
| 44         | 758         |
| 45         | 763         |
| 46         | 768         |
| 47         | 773         |
| 48         | 779         |
| 49         | 784         |
| 50         | 789         |
| 51         | 794         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 52        | 802         |
| 53        | 804         |
| 54        | 810         |
| 55        | 815         |
| 56        | 821         |
| 57        | 826         |
| 58        | 832         |
| 59        | 838         |
| 60        | 843         |
| 61        | 850         |
| 62        | 856         |
| 63        | 862         |
| 64        | 869         |
| 65        | 876         |
| 66        | 884         |
| 67        | 892         |
| 68        | 900         |
| 69        | 910         |
| 70        | 920         |
| 71        | 930         |
| 72        | 943         |
| 73        | 956         |
| 74        | 957         |
| 75        | 959         |
| 76        | 962         |
| 77        | 966         |
| 78        | 971         |
| 79        | 979         |
| 80        | 992         |

## 2007 Grade 8 Benchmark Examination Raw to Scale Score Conversion Tables for Literacy

| BELOW BASIC |             |  |  |
|-------------|-------------|--|--|
| Raw Score   | Scale Score |  |  |
| 0.0         | 37          |  |  |
| 0.5         | 42          |  |  |
| 1.0         | 45          |  |  |
| 1.5         | 47          |  |  |
| 2.0         | 48          |  |  |
| 2.5         | 50          |  |  |
| 3.0         | 51          |  |  |
| 3.5         | 51          |  |  |
| 4.0         | 52          |  |  |
| 4.5         | 53          |  |  |
| 5.0         | 54          |  |  |
| 5.5         | 54          |  |  |
| 6.0         | 55          |  |  |
| 6.5         | 68          |  |  |
| 7.0         | 79          |  |  |
| 7.5         | 90          |  |  |
| 8.0         | 100         |  |  |
| 8.5         | 110         |  |  |
| 9.0         | 119         |  |  |
| 9.5         | 127         |  |  |
| 10.0        | 135         |  |  |
| 10.5        | 143         |  |  |
| 11.0        | 150         |  |  |
| 11.5        | 157         |  |  |
| 12.0        | 164         |  |  |
| 12.5        | 171         |  |  |
| 13.0        | 177         |  |  |
| 13.5        | 183         |  |  |
| 14.0        | 189         |  |  |
| 14.5        | 195         |  |  |
| 15.0        | 200         |  |  |
| 15.5        | 206         |  |  |
| 16.0        | 211         |  |  |
| 16.5        | 217         |  |  |
| 17.0        | 222         |  |  |
| 17.5        | 227         |  |  |
| 18.0        | 232         |  |  |
| 18.5        | 237         |  |  |
| 19.0        | 241         |  |  |
| 19.5        | 246         |  |  |
| 20.0        | 251         |  |  |
| 20.5        | 256         |  |  |
| 21.0        | 260         |  |  |
| 21.5        | 265         |  |  |
| 22.0        | 269         |  |  |
| 22.5        | 274         |  |  |
| 23.0        | 278         |  |  |
| 23.5        | 282         |  |  |

| BASIC     |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 47.5      | 507         |
| 48.0      | 510         |
| 48.5      | 515         |
| 49.0      | 520         |
| 49.5      | 526         |
| 50.0      | 531         |
| 50.5      | 537         |
| 51.0      | 542         |
| 51.5      | 548         |
| 52.0      | 553         |
| 52.5      | 559         |
| 53.0      | 564         |
| 53.5      | 570         |
| 54.0      | 576         |
| 54.5      | 581         |
| 55.0      | 587         |
| 55.5      | 593         |
| 56.0      | 599         |
| 56.5      | 604         |
| 57.0      | 610         |
| 57.5      | 616         |
| 58.0      | 622         |
| 58.5      | 628         |
| 59.0      | 633         |
| 59.5      | 639         |
| 60.0      | 645         |
| 60.5      | 651         |
| 61.0      | 657         |
| 61.5      | 663         |
| 62.0      | 669         |
| 62.5      | 675         |
| 63.0      | 681         |
| 63.5      | 687         |
| 64.0      | 694         |

| PROFICIENT |             |
|------------|-------------|
| Raw Score  | Scale Score |
| 64.5       | 700         |
| 65.0       | 706         |
| 65.5       | 712         |
| 66.0       | 719         |
| 66.5       | 725         |
| 67.0       | 732         |
| 67.5       | 738         |
| 68.0       | 745         |
| 68.5       | 751         |
| 69.0       | 758         |
| 69.5       | 765         |
| 70.0       | 772         |
| 70.5       | 779         |
| 71.0       | 786         |
| 71.5       | 793         |
| 72.0       | 800         |
| 72.5       | 808         |
| 73.0       | 815         |
| 73.5       | 822         |
| 74.0       | 830         |
| 74.5       | 838         |
| 75.0       | 846         |
| 75.5       | 854         |
| 76.0       | 862         |
| 76.5       | 870         |
| 77.0       | 878         |
| 77.5       | 887         |
| 78.0       | 896         |
| 78.5       | 904         |

| ADVANCED  |             |
|-----------|-------------|
| Raw Score | Scale Score |
| 79.0      | 914         |
| 79.5      | 922         |
| 80.0      | 932         |
| 80.5      | 941         |
| 81.0      | 951         |
| 81.5      | 956         |
| 82.0      | 957         |
| 82.5      | 957         |
| 83.0      | 957         |
| 83.5      | 958         |
| 84.0      | 958         |
| 84.5      | 959         |
| 85.0      | 959         |
| 85.5      | 960         |
| 86.0      | 960         |
| 86.5      | 961         |
| 87.0      | 961         |
| 87.5      | 962         |
| 88.0      | 962         |
| 88.5      | 963         |
| 89.0      | 964         |
| 89.5      | 964         |
| 90.0      | 965         |
| 90.5      | 966         |
| 91.0      | 967         |
| 91.5      | 967         |
| 92.0      | 968         |
| 92.5      | 970         |
| 93.0      | 971         |
| 93.5      | 972         |
| 94.0      | 974         |
| 94.5      | 976         |
| 95.0      | 979         |
| 95.5      | 984         |
| 96.0      | 993         |