



Arkansas Comprehensive Testing, Assessment and Accountability Program

## **Algebra I Mid-Year End-of-Course Examination Raw To Scale Score Conversion Table**

**January 2006 Administration**

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### **Introduction**

The *Raw to Scale Score Conversion Table* provides information on raw scores attained by students for Algebra I on the *Algebra I Mid-Year End-of-Course Examination*, and how those scores correspond with student scale scores.

**The attached *Raw to Scale Score Conversion Table* is specific to the January 2006 administration of the *Algebra I Mid-Year End-of-Course Examination* and does 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 *Algebra I Mid-Year End-of-Course Examination* was constructed so that a scale score of 250 corresponds to the *Advanced* performance level, a scale score of 200 corresponds to the *Proficient* performance level, and a scale score of 152 corresponds to the *Basic* performance level.

## January 2006 Scale Scores

The attached *Raw to Scale Score Conversion Table* lists the total number of raw score points available for Algebra I as well as the associated scale score for each raw score point.

The table below contains the performance levels and associated scale scores for the *Algebra I Mid-Year End-of-Course Examination*. **Again, the scale score information listed in this table is specific to the January 2006 administration of the *Algebra I Mid-Year End-of-Course Examination* and cannot be used for any other administration of this test.**

### Scale Scores and Performance Levels for the Algebra I Mid-Year End-of-Course Examination

Performance Levels	Scale Score Ranges
Below Basic	0 – 151
Basic	152 – 199
Proficient	200 – 249
Advanced	250+

The *Algebra I Mid-Year End-of-Course Examination 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:

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## Arkansas Algebra I Mid-Year End-of-Course Examination

January 2006

### Raw to Scale Score Conversion Tables for Mid-Year Algebra I

Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score
0	0	34	176	68	244
1	4	35	179	69	245
2	7	36	181	70	247
3	12	37	184	71	250
4	23	38	187	72	251
5	36	39	189	73	254
6	47	40	191	74	256
7	56	41	194	75	258
8	65	42	196	76	260
9	73	43	198	77	263
10	80	44	200	78	265
11	86	45	203	79	268
12	92	46	205	80	270
13	98	47	207	81	273
14	103	48	209	82	276
15	108	49	211	83	279
16	113	50	213	84	282
17	118	51	214	85	286
18	122	52	216	86	289
19	126	53	218	87	293
20	130	54	220	88	297
21	134	55	221	89	302
22	138	56	223	90	307
23	142	57	225	91	312
24	145	58	226	92	318
25	149	59	228	93	325
26	152	60	230	94	333
27	155	61	231	95	342
28	158	62	233	96	353
29	162	63	235	97	367
30	165	64	236	98	387
31	168	65	238	99	421
32	170	66	240	100	481
33	173	67	242		

