

## **4. THE 2003 MSA-READING STATISTICAL SUMMARY**

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**Table 4.1 The 2003 MSA-Reading Classical Descriptive Statistics: Grades 3, 5, and 8\***

Grade	Form	# Items	n	Mean	SD	Reliability	SEM
3	1	37	8,298	24.78	8.22	.893	2.689
	2	37	8,615	25.09	8.11	.891	2.678
	3	37	8,562	26.01	8.04	.886	2.715
	4	37	8,466	24.12	7.94	.892	2.609
	5	37	8,597	25.40	8.50	.900	2.688
	6	37	8,291	24.88	8.18	.901	2.574
	7	37	7,619	25.73	7.87	.887	2.646
5	1	37	8,414	26.65	8.26	.893	2.702
	2	37	8,888	27.50	7.99	.890	2.650
	3	37	8,874	28.14	7.74	.883	2.647
	4	37	8,833	28.46	7.92	.885	2.686
	5	37	8,757	27.50	7.93	.892	2.606
	6	37	8,488	26.91	7.88	.890	2.614
	7	37	7,947	28.18	7.77	.882	2.669
8	1	34	8,326	26.10	7.73	.884	2.633
	2	34	8,799	26.31	7.91	.890	2.623
	3	34	8,824	26.90	7.42	.885	2.516
	4	34	8,874	26.00	7.33	.880	2.539
	5	34	8,787	25.52	7.29	.882	2.504
	6	34	8,604	26.94	7.00	.873	2.495
	7	34	4,013	26.52	7.14	.870	2.574

\* Note: The analyses were based on the sample of data used to equate the forms of the 2003 MSA-Reading

**Table 4.2 The 2003 MSA-Reading Scale Score Descriptive Statistics: Grades 3, 5, and 8**

Grade	Form	# Items	n	Mean	SD	Conditional SEM at Cut-Points	
						Prof.	Adv.
3	1	37	9,596	415.84	48.23	12	16
	2	37	9,341	418.17	47.72	12	16
	3	37	9,368	418.27	48.31	12	20
	4	37	9,252	418.85	49.73	12	20
	5	37	9,282	418.78	50.35	12	16
	6	37	9,343	417.74	53.14	12	20
	7	37	8,289	423.76	47.58	12	16
5	1	37	10,050	421.58	47.98	12	16
	2	37	9,867	423.48	48.74	12	16
	3	37	9,802	423.81	48.07	12	16
	4	37	9,739	423.75	47.04	12	16
	5	37	9,696	414.68	50.16	12	16
	6	37	9,700	422.82	50.06	12	16
	7	37	8,868	430.26	46.71	12	12
8	1	34	9,763	429.08	54.13	12	16
	2	34	9,682	429.01	54.69	12	16
	3	34	9,716	429.77	51.71	12	16
	4	34	9,685	428.37	51.75	12	16
	5	34	9,669	428.38	52.51	12	16
	6	34	9,658	429.37	51.93	12	16
	7	34	9,533	439.92	50.73	12	16

**Table 4.3 The 2003 MSA-Reading Strand Correlations: Grade 3\***

Form	n	1	2	3
<b>Form 1</b>				
1. General Reading	8,298	1.00		
2. Literary Reading	8,298	0.66	1.00	
3. Information Reading	8,298	0.68	0.73	1.00
<b>Form 2</b>				
1. General Reading	8,615	1.00		
2. Literary Reading	8,615	0.67	1.00	
3. Information Reading	8,615	0.66	0.71	1.00
<b>Form 3</b>				
1. General Reading	8,562	1.00		
2. Literary Reading	8,562	0.66	1.00	
3. Information Reading	8,562	0.67	0.71	1.00
<b>Form 4</b>				
1. General Reading	8,466	1.00		
2. Literary Reading	8,466	0.68	1.00	
3. Information Reading	8,466	0.68	0.73	1.00
<b>Form 5</b>				
1. General Reading	8,597	1.00		
2. Literary Reading	8,597	0.69	1.00	
3. Information Reading	8,597	0.69	0.75	1.00
<b>Form 6</b>				
1. General Reading	8,291	1.00		
2. Literary Reading	8,291	0.69	1.00	
3. Information Reading	8,291	0.71	0.75	1.00
<b>Form 7</b>				
1. General Reading	7,619	1.00		
2. Literary Reading	7,619	0.64	1.00	
3. Information Reading	7,619	0.68	0.72	1.00

\*Note: The analyses were based on the sample of data used to equate the forms of the 2003 MSA-Reading

**Table 4.4 The 2003 MSA-Reading Strand Correlations: Grade 5\***

Form	n	1	2	3
<b>Form 1</b>				
1. General Reading	8,414	1.00		
2. Literary Reading	8,414	0.69	1.00	
3. Information Reading	8,414	0.66	0.69	1.00
<b>Form 2</b>				
1. General Reading	8,888	1.00		
2. Literary Reading	8,888	0.68	1.00	
3. Information Reading	8,888	0.67	0.68	1.00
<b>Form 3</b>				
1. General Reading	8,874	1.00		
2. Literary Reading	8,874	0.66	1.00	
3. Information Reading	8,874	0.65	0.66	1.00
<b>Form 4</b>				
1. General Reading	8,833	1.00		
2. Literary Reading	8,833	0.68	1.00	
3. Information Reading	8,833	0.66	0.66	1.00
<b>Form 5</b>				
1. General Reading	8,757	1.00		
2. Literary Reading	8,757	0.68	1.00	
3. Information Reading	8,757	0.67	0.68	1.00
<b>Form 6</b>				
1. General Reading	8,488	1.00		
2. Literary Reading	8,488	0.68	1.00	
3. Information Reading	8,488	0.69	0.69	1.00
<b>Form 7</b>				
1. General Reading	7,947	1.00		
2. Literary Reading	7,947	0.69	1.00	
3. Information Reading	7,947	0.64	0.69	1.00

\*Note: The analyses were based on the sample of data used to equate the forms of the 2003 MSA-Reading

**Table 4.5 The 2003 MSA-Reading Strand Correlations: Grade 8\***

Form	n	1	2	3
<b>Form 1</b>				
1. General Reading	8,326	1.00		
2. Literary Reading	8,326	0.70	1.00	
3. Information Reading	8,326	0.73	0.71	1.00
<b>Form 2</b>				
1. General Reading	8,799	1.00		
2. Literary Reading	8,799	0.68	1.00	
3. Information Reading	8,799	0.77	0.73	1.00
<b>Form 3</b>				
1. General Reading	8,824	1.00		
2. Literary Reading	8,824	0.66	1.00	
3. Information Reading	8,824	0.74	0.71	1.00
<b>Form 4</b>				
1. General Reading	8,874	1.00		
2. Literary Reading	8,874	0.68	1.00	
3. Information Reading	8,874	0.74	0.69	1.00
<b>Form 5</b>				
1. General Reading	8,787	1.00		
2. Literary Reading	8,787	0.68	1.00	
3. Information Reading	8,787	0.75	0.69	1.00
<b>Form 6</b>				
1. General Reading	8,604	1.00		
2. Literary Reading	8,604	0.66	1.00	
3. Information Reading	8,604	0.73	0.68	1.00
<b>Form 7</b>				
1. General Reading	4,013	1.00		
2. Literary Reading	4,013	0.68	1.00	
3. Information Reading	4,013	0.73	0.67	1.00

\*Note: The analyses were based on the sample of data used to equate the forms of the 2003 MSA-Reading

**Table 4.6 The 2003 MSA-Reading Decision Accuracy and Consistency Indices: Grade 3**

Form	Performance Cut*	Accuracy	False Positive	False Negative	Consistency
1	<i>B : PA</i>	.90	.04	.06	.86
	<i>BP : A</i>	.96	.02	.01	.95
2	<i>B : PA</i>	.90	.05	.06	.86
	<i>BP : A</i>	.96	.03	.01	.94
3	<i>B : PA</i>	.90	.05	.06	.85
	<i>BP : A</i>	.96	.02	.02	.94
4	<i>B : PA</i>	.90	.05	.06	.86
	<i>BP : A</i>	.96	.03	.01	.94
5	<i>B : PA</i>	.90	.05	.05	.86
	<i>BP : A</i>	.96	.03	.01	.94
6	<i>B : PA</i>	.90	.04	.05	.86
	<i>BP : A</i>	.96	.02	.01	.95
7	<i>B : PA</i>	.90	.05	.06	.85
	<i>BP : A</i>	.96	.03	.01	.94

\*Note: B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced

**Table 4.7 The 2003 MSA-Reading Decision Accuracy and Consistency Indices: Grade 5**

Form	Performance Cut*	Accuracy	False Positive	False Negative	Consistency
1	<i>B : PA</i>	.90	.05	.05	.87
	<i>BP : A</i>	.91	.05	.04	.88
2	<i>B : PA</i>	.90	.05	.05	.86
	<i>BP : A</i>	.91	.05	.04	.88
3	<i>B : PA</i>	.90	.05	.05	.86
	<i>BP : A</i>	.91	.05	.04	.87
4	<i>B : PA</i>	.90	.05	.05	.86
	<i>BP : A</i>	.91	.06	.04	.87
5	<i>B : PA</i>	.90	.05	.05	.86
	<i>BP : A</i>	.91	.05	.04	.88
6	<i>B : PA</i>	.90	.04	.05	.86
	<i>BP : A</i>	.91	.05	.04	.87
7	<i>B : PA</i>	.90	.05	.05	.86
	<i>BP : A</i>	.91	.05	.04	.87

\*Note: B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced



**Table 4.8 The 2003 MSA-Reading Decision Accuracy and Consistency Indices: Grade 8**

Form	Performance Cut*	Accuracy	False Positive	False Negative	Consistency
1	<i>B : PA</i>	.91	.04	.05	.87
	<i>BP : A</i>	.88	.06	.05	.84
2	<i>B : PA</i>	.91	.04	.05	.88
	<i>BP : A</i>	.89	.06	.05	.84
3	<i>B : PA</i>	.91	.04	.05	.87
	<i>BP : A</i>	.88	.06	.06	.84
4	<i>B : PA</i>	.91	.05	.05	.87
	<i>BP : A</i>	.88	.06	.06	.83
5	<i>B : PA</i>	.91	.04	.05	.87
	<i>BP : A</i>	.88	.06	.06	.84
6	<i>B : PA</i>	.90	.04	.05	.86
	<i>BP : A</i>	.88	.06	.06	.83
7	<i>B : PA</i>	.90	.04	.06	.86
	<i>BP : A</i>	.88	.07	.06	.83

\*Note: B:PA denotes the cut between basic and Proficient, while BP:A denotes the cut between Proficient and Advanced

**Table 4.9 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 3 Form 1**

Raw Score	Scale Score (SS)	Form 1		
		Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	191	56	135	247
1	220	40	180	260
2	252	28	224	280
3	271	24	247	295
4	286	20	266	306
5	298	20	278	318
6	308	16	292	324
7	317	16	301	333
8	325	16	309	341
9	332	16	316	348
10	340	16	324	356
11	346	16	330	362
12	352	12	340	364
13	358	12	346	370
14	363	12	351	375
15	369	12	357	381
16	374	12	362	386
17	379	12	367	391
18	384	12	372	396
19	389	12	377	401
20	394	12	382	406
21	399	12	387	411
22	404	12	392	416
23	409	12	397	421
24	414	12	402	426
25	419	12	407	431
26	424	12	412	436
27	429	12	417	441
28	434	12	422	446
29	440	12	428	452
30	445	12	433	457
31	451	12	439	463
32	457	12	445	469
33	464	16	448	480
34	470	16	454	486
35	478	16	462	494
36	485	16	469	501
37	494	16	478	510
38	503	16	487	519
39	513	20	493	533
40	525	20	505	545
41	538	24	514	562
42	555	24	531	579
43	576	32	544	608
44	610	40	570	650
45	640	56	584	696

**Table 4.10 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 3 Form 2**

<u>Form 2</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	198	56	142	254
1	226	40	186	266
2	256	28	228	284
3	275	24	251	299
4	289	20	269	309
5	300	20	280	320
6	310	16	294	326
7	318	16	302	334
8	326	16	310	342
9	333	16	317	349
10	340	16	324	356
11	346	12	334	358
12	352	12	340	364
13	358	12	346	370
14	363	12	351	375
15	368	12	356	380
16	374	12	362	386
17	379	12	367	391
18	384	12	372	396
19	389	12	377	401
20	394	12	382	406
21	398	12	386	410
22	403	12	391	415
23	408	12	396	420
24	413	12	401	425
25	418	12	406	430
26	423	12	411	435
27	428	12	416	440
28	434	12	422	446
29	439	12	427	451
30	444	12	432	456
31	450	12	438	462
32	456	12	444	468
33	463	16	447	479
34	470	16	454	486
35	477	16	461	493
36	485	16	469	501
37	493	16	477	509
38	502	20	482	522
39	513	20	493	533
40	525	20	505	545
41	539	24	515	563
42	556	24	532	580
43	578	32	546	610
44	612	40	572	652
45	643	56	587	699

**Table 4.11 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 3 Form 3**

<u>Form 3</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	198	56	142	254
1	227	40	187	267
2	257	28	229	285
3	275	24	251	299
4	289	20	269	309
5	300	20	280	320
6	309	16	293	325
7	317	16	301	333
8	324	16	308	340
9	331	16	315	347
10	338	12	326	350
11	344	12	332	356
12	349	12	337	361
13	354	12	342	366
14	360	12	348	372
15	364	12	352	376
16	370	12	358	382
17	374	12	362	386
18	379	12	367	391
19	384	12	372	396
20	388	12	376	400
21	392	12	380	404
22	397	12	385	409
23	402	12	390	414
24	406	12	394	418
25	411	12	399	423
26	416	12	404	428
27	421	12	409	433
28	426	12	414	438
29	432	12	420	444
30	437	12	425	449
31	443	12	431	455
32	450	16	434	466
33	456	16	440	472
34	464	16	448	480
35	471	16	455	487
36	480	16	464	496
37	490	20	470	510
38	501	20	481	521
39	514	20	494	534
40	529	24	505	553
41	548	28	520	576
42	575	32	543	607
43	614	40	574	654
44	667	48	619	715
45	706	60	646	766

**Table 4.12 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 3 Form 4**

Raw Score	Form 4			
	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	198	56	142	254
1	228	40	188	268
2	258	28	230	286
3	277	24	253	301
4	291	20	271	311
5	302	20	282	322
6	312	16	296	328
7	321	16	305	337
8	329	16	313	345
9	336	16	320	352
10	343	16	327	359
11	349	12	337	361
12	355	12	343	367
13	361	12	349	373
14	366	12	354	378
15	372	12	360	384
16	377	12	365	389
17	382	12	370	394
18	387	12	375	399
19	392	12	380	404
20	397	12	385	409
21	402	12	390	414
22	407	12	395	419
23	412	12	400	424
24	417	12	405	429
25	422	12	410	434
26	428	12	416	440
27	433	12	421	445
28	439	12	427	451
29	445	12	433	457
30	451	16	435	467
31	458	16	442	474
32	465	16	449	481
33	473	16	457	489
34	481	16	465	497
35	491	20	471	511
36	502	20	482	522
37	515	24	491	539
38	532	24	508	556
39	553	32	521	585
40	585	40	545	625
41	639	48	591	687
42	697	44	653	741
43	741	40	701	781
44	786	44	742	800
45	800	60	762	800

\*Note: The highest obtainable scale score is 800

**Table 4.13 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 3 Form 5**

<u>Form 5</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	201	56	145	257
1	230	40	190	270
2	260	28	232	288
3	278	24	254	302
4	292	20	272	312
5	302	20	282	322
6	312	16	296	328
7	320	16	304	336
8	327	16	311	343
9	334	16	318	350
10	340	12	328	352
11	346	12	334	358
12	352	12	340	364
13	357	12	345	369
14	362	12	350	374
15	367	12	355	379
16	372	12	360	384
17	377	12	365	389
18	382	12	370	394
19	386	12	374	398
20	391	12	379	403
21	396	12	384	408
22	401	12	389	413
23	406	12	394	418
24	410	12	398	422
25	415	12	403	427
26	420	12	408	432
27	426	12	414	438
28	431	12	419	443
29	436	12	424	448
30	442	12	430	454
31	448	12	436	460
32	454	16	438	470
33	460	16	444	476
34	467	16	451	483
35	475	16	459	491
36	483	16	467	499
37	492	16	476	508
38	502	20	482	522
39	513	20	493	533
40	526	20	506	546
41	541	24	517	565
42	560	28	532	588
43	584	32	552	616
44	621	44	577	665
45	653	56	597	709

**Table 4.14 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 3 Form 6**

<u>Form 6</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	188	56	132	244
1	218	40	178	258
2	249	28	221	277
3	269	24	245	293
4	284	20	264	304
5	295	20	275	315
6	306	16	290	322
7	314	16	298	330
8	322	16	306	338
9	330	16	314	346
10	336	16	320	352
11	343	16	327	359
12	349	12	337	361
13	355	12	343	367
14	360	12	348	372
15	366	12	354	378
16	371	12	359	383
17	376	12	364	388
18	382	12	370	394
19	387	12	375	399
20	392	12	380	404
21	397	12	385	409
22	402	12	390	414
23	407	12	395	419
24	412	12	400	424
25	418	12	406	430
26	423	12	411	435
27	428	12	416	440
28	434	12	422	446
29	440	12	428	452
30	446	16	430	462
31	453	16	437	469
32	460	16	444	476
33	468	16	452	484
34	476	16	460	492
35	485	20	465	505
36	496	20	476	516
37	508	20	488	528
38	524	24	500	548
39	543	28	515	571
40	568	32	536	600
41	600	36	564	636
42	638	40	598	678
43	682	44	638	726
44	742	52	690	794
45	788	64	724	800

\*Note: The highest obtainable scale score is 800

**Table 4.15 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 3 Form 7**

<u>Form 7</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	195	56	139	251
1	224	40	184	264
2	254	28	226	282
3	273	24	249	297
4	287	20	267	307
5	298	20	278	318
6	308	16	292	324
7	317	16	301	333
8	325	16	309	341
9	332	16	316	348
10	339	16	323	355
11	346	12	334	358
12	352	12	340	364
13	357	12	345	369
14	363	12	351	375
15	368	12	356	380
16	374	12	362	386
17	379	12	367	391
18	384	12	372	396
19	389	12	377	401
20	394	12	382	406
21	399	12	387	411
22	404	12	392	416
23	409	12	397	421
24	414	12	402	426
25	419	12	407	431
26	424	12	412	436
27	430	12	418	442
28	435	12	423	447
29	441	12	429	453
30	446	12	434	458
31	452	12	440	464
32	459	16	443	475
33	466	16	450	482
34	473	16	457	489
35	480	16	464	496
36	489	16	473	505
37	498	16	482	514
38	508	20	488	528
39	519	20	499	539
40	532	20	512	552
41	547	24	523	571
42	564	28	536	592
43	587	32	555	619
44	621	40	581	661
45	652	56	596	708



**Table 4.16 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 5 Form 1**

Raw Score	Scale Score (SS)	Form 1		
		Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	208	56	152	264
1	236	40	196	276
2	266	28	238	294
3	284	24	260	308
4	297	20	277	317
5	307	16	291	323
6	316	16	300	332
7	324	16	308	340
8	331	16	315	347
9	338	16	322	354
10	344	12	332	356
11	350	12	338	362
12	355	12	343	367
13	360	12	348	372
14	365	12	353	377
15	370	12	358	382
16	375	12	363	387
17	379	12	367	391
18	384	12	372	396
19	388	12	376	400
20	393	12	381	405
21	397	12	385	409
22	402	12	390	414
23	406	12	394	418
24	411	12	399	423
25	415	12	403	427
26	420	12	408	432
27	425	12	413	437
28	430	12	418	442
29	435	12	423	447
30	440	12	428	452
31	446	12	434	458
32	452	12	440	464
33	458	16	442	474
34	464	16	448	480
35	472	16	456	488
36	479	16	463	495
37	488	16	472	504
38	498	20	478	518
39	509	20	489	529
40	523	24	499	547
41	539	24	515	563
42	558	28	530	586
43	584	32	552	616
44	622	44	578	666
45	656	60	596	716

**Table 4.17 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 5 Form 2**

<u>Form 2</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	195	56	139	251
1	224	40	184	264
2	254	28	226	282
3	272	24	248	296
4	286	20	266	306
5	297	20	277	317
6	306	16	290	322
7	314	16	298	330
8	322	16	306	338
9	329	16	313	345
10	335	12	323	347
11	341	12	329	353
12	347	12	335	359
13	352	12	340	364
14	357	12	345	369
15	362	12	350	374
16	367	12	355	379
17	372	12	360	384
18	377	12	365	389
19	382	12	370	394
20	386	12	374	398
21	391	12	379	403
22	396	12	384	408
23	400	12	388	412
24	405	12	393	417
25	410	12	398	422
26	415	12	403	427
27	420	12	408	432
28	425	12	413	437
29	430	12	418	442
30	436	12	424	448
31	442	12	430	454
32	448	16	432	464
33	454	16	438	470
34	461	16	445	477
35	469	16	453	485
36	477	16	461	493
37	486	16	470	502
38	496	20	476	516
39	507	20	487	527
40	520	24	496	544
41	536	24	512	560
42	556	28	528	584
43	584	36	548	620
44	627	44	583	671
45	662	60	602	722

**Table 4.18 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 5 Form 3**

<u>Form 3</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	189	56	133	245
1	218	40	178	258
2	249	28	221	277
3	268	24	244	292
4	282	20	262	302
5	293	20	273	313
6	302	16	286	318
7	311	16	295	327
8	319	16	303	335
9	326	16	310	342
10	332	16	316	348
11	338	12	326	350
12	344	12	332	356
13	350	12	338	362
14	355	12	343	367
15	360	12	348	372
16	365	12	353	377
17	370	12	358	382
18	374	12	362	386
19	379	12	367	391
20	384	12	372	396
21	389	12	377	401
22	393	12	381	405
23	398	12	386	410
24	402	12	390	414
25	407	12	395	419
26	412	12	400	424
27	417	12	405	429
28	422	12	410	434
29	427	12	415	439
30	432	12	420	444
31	438	12	426	450
32	444	12	432	456
33	450	16	434	466
34	457	16	441	473
35	464	16	448	480
36	472	16	456	488
37	480	16	464	496
38	490	20	470	510
39	501	20	481	521
40	514	24	490	538
41	531	24	507	555
42	552	28	524	580
43	582	36	546	618
44	624	44	580	668
45	660	60	600	720

**Table 4.19 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 5 Form 4**

<u>Form 4</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	188	56	132	244
1	218	40	178	258
2	250	28	222	278
3	269	24	245	293
4	283	20	263	303
5	295	20	275	315
6	304	16	288	320
7	313	16	297	329
8	320	16	304	336
9	327	16	311	343
10	334	12	322	346
11	340	12	328	352
12	345	12	333	357
13	350	12	338	362
14	356	12	344	368
15	360	12	348	372
16	365	12	353	377
17	370	12	358	382
18	374	12	362	386
19	379	12	367	391
20	384	12	372	396
21	388	12	376	400
22	392	12	380	404
23	397	12	385	409
24	402	12	390	414
25	406	12	394	418
26	411	12	399	423
27	416	12	404	428
28	420	12	408	432
29	425	12	413	437
30	430	12	418	442
31	436	12	424	448
32	441	12	429	453
33	447	12	435	459
34	454	16	438	470
35	460	16	444	476
36	468	16	452	484
37	476	16	460	492
38	485	16	469	501
39	495	20	475	515
40	507	20	487	527
41	521	24	497	545
42	539	28	511	567
43	564	32	532	596
44	602	44	558	646
45	635	60	575	695

**Table 4.20 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 5 Form 5**

<u>Form 5</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	182	56	126	238
1	212	40	172	252
2	244	28	216	272
3	264	24	240	288
4	279	20	259	299
5	291	20	271	311
6	302	16	286	318
7	311	16	295	327
8	319	16	303	335
9	326	16	310	342
10	333	16	317	349
11	340	12	328	352
12	346	12	334	358
13	351	12	339	363
14	357	12	345	369
15	362	12	350	374
16	367	12	355	379
17	372	12	360	384
18	377	12	365	389
19	382	12	370	394
20	386	12	374	398
21	391	12	379	403
22	396	12	384	408
23	401	12	389	413
24	406	12	394	418
25	410	12	398	422
26	415	12	403	427
27	420	12	408	432
28	425	12	413	437
29	431	12	419	443
30	436	12	424	448
31	442	12	430	454
32	448	16	432	464
33	455	16	439	471
34	462	16	446	478
35	470	16	454	486
36	478	16	462	494
37	488	20	468	508
38	499	20	479	519
39	512	24	488	536
40	528	24	504	552
41	548	28	520	576
42	570	28	542	598
43	598	32	566	630
44	636	44	592	680
45	668	56	612	724

**Table 4.21 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 5 Form 6**

<u>Form 6</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	198	56	142	254
1	227	40	187	267
2	257	28	229	285
3	275	24	251	299
4	288	20	268	308
5	300	20	280	320
6	309	16	293	325
7	317	16	301	333
8	324	16	308	340
9	331	16	315	347
10	338	12	326	350
11	343	12	331	355
12	349	12	337	361
13	354	12	342	366
14	360	12	348	372
15	365	12	353	377
16	370	12	358	382
17	374	12	362	386
18	379	12	367	391
19	384	12	372	396
20	389	12	377	401
21	394	12	382	406
22	398	12	386	410
23	403	12	391	415
24	408	12	396	420
25	413	12	401	425
26	418	12	406	430
27	423	12	411	435
28	428	12	416	440
29	434	12	422	446
30	439	12	427	451
31	446	16	430	462
32	452	16	436	468
33	459	16	443	475
34	466	16	450	482
35	475	16	459	491
36	484	20	464	504
37	496	20	476	516
38	508	24	484	532
39	525	24	501	549
40	545	28	517	573
41	572	32	540	604
42	605	36	569	641
43	642	36	606	678
44	688	44	644	732
45	724	60	664	784

**Table 4.22 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 5 Form 7**

<u>Form 7</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	205	56	149	261
1	234	40	194	274
2	263	28	235	291
3	281	24	257	305
4	294	20	274	314
5	305	16	289	321
6	314	16	298	330
7	322	16	306	338
8	329	16	313	345
9	336	16	320	352
10	342	12	330	354
11	348	12	336	360
12	353	12	341	365
13	358	12	346	370
14	364	12	352	376
15	368	12	356	380
16	373	12	361	385
17	378	12	366	390
18	383	12	371	395
19	387	12	375	399
20	392	12	380	404
21	396	12	384	408
22	401	12	389	413
23	405	12	393	417
24	410	12	398	422
25	414	12	402	426
26	419	12	407	431
27	424	12	412	436
28	429	12	417	441
29	434	12	422	446
30	439	12	427	451
31	445	12	433	457
32	450	12	438	462
33	456	12	444	468
34	463	16	447	479
35	470	16	454	486
36	477	16	461	493
37	486	16	470	502
38	495	16	479	511
39	505	20	485	525
40	517	20	497	537
41	532	24	508	556
42	550	28	522	578
43	574	32	542	606
44	612	44	568	656
45	645	60	585	705

**Table 4.23 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 8 Form 1**

<u>Form 1</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	187	56	131	243
1	218	40	178	258
2	251	28	223	279
3	272	24	248	296
4	287	20	267	307
5	300	20	280	320
6	310	20	290	330
7	320	16	304	336
8	328	16	312	344
9	335	16	319	351
10	342	16	326	358
11	348	12	336	360
12	354	12	342	366
13	360	12	348	372
14	365	12	353	377
15	370	12	358	382
16	376	12	364	388
17	380	12	368	392
18	385	12	373	397
19	390	12	378	402
20	394	12	382	406
21	399	12	387	411
22	403	12	391	415
23	408	12	396	420
24	412	12	400	424
25	417	12	405	429
26	421	12	409	433
27	426	12	414	438
28	431	12	419	443
29	436	12	424	448
30	441	12	429	453
31	446	12	434	458
32	452	12	440	464
33	457	12	445	469
34	464	16	448	480
35	470	16	454	486
36	477	16	461	493
37	485	16	469	501
38	494	16	478	510
39	503	20	483	523
40	514	20	494	534
41	528	24	504	552
42	544	24	520	568
43	564	28	536	592
44	597	40	557	637
45	628	56	572	684



**Table 4.24 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 8 Form 2**

<u>Form 2</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	186	56	130	242
1	216	40	176	256
2	248	28	220	276
3	269	24	245	293
4	284	20	264	304
5	296	20	276	316
6	307	20	287	327
7	316	16	300	332
8	324	16	308	340
9	332	16	316	348
10	339	16	323	355
11	345	12	333	357
12	351	12	339	363
13	356	12	344	368
14	362	12	350	374
15	367	12	355	379
16	372	12	360	384
17	377	12	365	389
18	382	12	370	394
19	386	12	374	398
20	391	12	379	403
21	395	12	383	407
22	400	12	388	412
23	404	12	392	416
24	409	12	397	421
25	413	12	401	425
26	418	12	406	430
27	422	12	410	434
28	427	12	415	439
29	432	12	420	444
30	437	12	425	449
31	442	12	430	454
32	448	12	436	460
33	454	12	442	466
34	460	16	444	476
35	466	16	450	482
36	473	16	457	489
37	481	16	465	497
38	490	16	474	506
39	499	20	479	519
40	510	20	490	530
41	524	24	500	548
42	540	24	516	564
43	560	28	532	588
44	593	40	553	633
45	624	56	568	680

**Table 4.25 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 8 Form 3**

<u>Form 3</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	186	56	130	242
1	216	40	176	256
2	248	28	220	276
3	267	24	243	291
4	282	20	262	302
5	294	20	274	314
6	304	16	288	320
7	314	16	298	330
8	322	16	306	338
9	329	16	313	345
10	336	16	320	352
11	342	12	330	354
12	348	12	336	360
13	353	12	341	365
14	358	12	346	370
15	364	12	352	376
16	369	12	357	381
17	374	12	362	386
18	378	12	366	390
19	383	12	371	395
20	388	12	376	400
21	392	12	380	404
22	397	12	385	409
23	402	12	390	414
24	406	12	394	418
25	411	12	399	423
26	416	12	404	428
27	420	12	408	432
28	425	12	413	437
29	430	12	418	442
30	436	12	424	448
31	441	12	429	453
32	447	12	435	459
33	453	12	441	465
34	459	16	443	475
35	466	16	450	482
36	473	16	457	489
37	481	16	465	497
38	490	16	474	506
39	499	20	479	519
40	510	20	490	530
41	523	20	503	543
42	538	24	514	562
43	558	28	530	586
44	591	40	551	631
45	621	56	565	677

**Table 4.26 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 8 Form 4**

<u>Form 4</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	176	56	120	232
1	208	40	168	248
2	242	32	210	274
3	263	24	239	287
4	280	24	256	304
5	293	20	273	313
6	304	20	284	324
7	314	16	298	330
8	323	16	307	339
9	331	16	315	347
10	338	16	322	354
11	344	16	328	360
12	350	12	338	362
13	356	12	344	368
14	362	12	350	374
15	367	12	355	379
16	372	12	360	384
17	377	12	365	389
18	382	12	370	394
19	386	12	374	398
20	391	12	379	403
21	396	12	384	408
22	400	12	388	412
23	405	12	393	417
24	409	12	397	421
25	414	12	402	426
26	419	12	407	431
27	424	12	412	436
28	428	12	416	440
29	434	12	422	446
30	439	12	427	451
31	444	12	432	456
32	450	12	438	462
33	456	16	440	472
34	463	16	447	479
35	470	16	454	486
36	478	16	462	494
37	486	16	470	502
38	496	20	476	516
39	508	20	488	528
40	521	24	497	545
41	537	24	513	561
42	556	28	528	584
43	581	32	549	613
44	617	44	573	661
45	649	56	593	705

**Table 4.27 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 8 Form 5**

<u>Form 5</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	190	56	134	246
1	220	40	180	260
2	252	28	224	280
3	272	24	248	296
4	287	20	267	307
5	299	20	279	319
6	309	16	293	325
7	318	16	302	334
8	326	16	310	342
9	333	16	317	349
10	340	16	324	356
11	346	12	334	358
12	352	12	340	364
13	357	12	345	369
14	363	12	351	375
15	368	12	356	380
16	373	12	361	385
17	378	12	366	390
18	382	12	370	394
19	387	12	375	399
20	392	12	380	404
21	397	12	385	409
22	402	12	390	414
23	406	12	394	418
24	411	12	399	423
25	416	12	404	428
26	421	12	409	433
27	426	12	414	438
28	431	12	419	443
29	436	12	424	448
30	442	12	430	454
31	448	12	436	460
32	454	16	438	470
33	461	16	445	477
34	468	16	452	484
35	476	16	460	492
36	484	16	468	500
37	494	20	474	514
38	504	20	484	524
39	516	20	496	536
40	529	24	505	553
41	544	24	520	568
42	563	28	535	591
43	586	32	554	618
44	620	40	580	660
45	651	56	595	707

**Table 4.28 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 8 Form 6**

<u>Form 6</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	184	56	128	240
1	214	40	174	254
2	247	28	219	275
3	267	24	243	291
4	282	20	262	302
5	294	20	274	314
6	305	16	289	321
7	314	16	298	330
8	322	16	306	338
9	329	16	313	345
10	336	16	320	352
11	342	12	330	354
12	348	12	336	360
13	354	12	342	366
14	359	12	347	371
15	364	12	352	376
16	369	12	357	381
17	374	12	362	386
18	378	12	366	390
19	383	12	371	395
20	388	12	376	400
21	392	12	380	404
22	397	12	385	409
23	402	12	390	414
24	406	12	394	418
25	411	12	399	423
26	415	12	403	427
27	420	12	408	432
28	425	12	413	437
29	430	12	418	442
30	436	12	424	448
31	441	12	429	453
32	447	12	435	459
33	453	16	437	469
34	460	16	444	476
35	467	16	451	483
36	475	16	459	491
37	484	16	468	500
38	494	20	474	514
39	505	20	485	525
40	519	24	495	543
41	535	24	511	559
42	556	28	528	584
43	584	36	548	620
44	626	44	582	670
45	662	60	602	722

**Table 4.29 The 2003 MSA-Reading Raw Score to Scale Score Conversion Table: Grade 8 Form 7**

<u>Form 7</u>				
Raw Score	Scale Score (SS)	Standard Error (SEM)	SS - 1SEM	SS + 1SEM
0	194	56	138	250
1	224	40	184	264
2	256	28	228	284
3	276	24	252	300
4	291	20	271	311
5	303	20	283	323
6	313	16	297	329
7	322	16	306	338
8	330	16	314	346
9	338	16	322	354
10	344	16	328	360
11	351	12	339	363
12	356	12	344	368
13	362	12	350	374
14	368	12	356	380
15	373	12	361	385
16	378	12	366	390
17	383	12	371	395
18	388	12	376	400
19	392	12	380	404
20	397	12	385	409
21	402	12	390	414
22	406	12	394	418
23	411	12	399	423
24	415	12	403	427
25	420	12	408	432
26	425	12	413	437
27	430	12	418	442
28	435	12	423	447
29	440	12	428	452
30	445	12	433	457
31	450	12	438	462
32	456	12	444	468
33	462	16	446	478
34	469	16	453	485
35	476	16	460	492
36	484	16	468	500
37	492	16	476	508
38	502	20	482	522
39	512	20	492	532
40	525	20	505	545
41	540	24	516	564
42	558	28	530	586
43	582	32	550	614
44	617	40	577	657
45	649	56	593	705

**Table 4. 30 The 2003 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 3**

Form	Item	Perfect		Adjacent		Discrepancy		Total	
		n	%	N	%	n	%	n	%
1	1	7057	74.9	2293	24.3	77	0.8	9427	100.0
	2	6525	70.7	2597	28.1	113	1.2	9235	100.0
	3	6287	69.1	2685	29.5	120	1.3	9092	100.0
	4	7452	79.5	1878	20.0	39	0.4	9369	100.0
	5	6485	71.2	2537	27.9	84	0.9	9106	100.0
	6	6364	70.4	2499	27.7	171	1.9	9034	100.0
2	1	6718	73.6	2358	25.8	51	0.6	9127	100.0
	2	6300	69.7	2624	29.0	111	1.2	9035	100.0
	3	6645	75.3	2072	23.5	110	1.2	8827	100.0
	4	7657	85.5	1261	14.1	34	0.4	8952	100.0
	5	6960	77.2	2012	22.3	43	0.5	9015	100.0
	6	6976	78.7	1834	20.7	52	0.6	8862	100.0
3	1	6763	73.4	2348	25.5	102	1.1	9213	100.0
	2	6790	74.6	2251	24.7	56	0.6	9097	100.0
	3	6094	68.0	2741	30.6	121	1.4	8956	100.0
	4	7228	80.2	1671	18.5	118	1.3	9017	100.0
	5	7282	80.1	1773	19.5	37	0.4	9092	100.0
	6	6579	75.1	2144	24.5	38	0.4	8761	100.0
4	1	7269	80.6	1654	18.3	91	1.0	9014	100.0
	2	7651	85.3	1283	14.3	31	0.3	8965	100.0
	3	6696	76.8	1963	22.5	56	0.6	8715	100.0
	4	6928	77.2	2033	22.7	8	0.1	8969	100.0
	5	8141	90.2	862	9.6	21	0.2	9024	100.0
	6	6689	75.5	2007	22.7	164	1.9	8860	100.0
5	1	6746	74.7	2208	24.4	81	0.9	9035	100.0
	2	6198	71.0	2436	27.9	90	1.0	8724	100.0
	3	5282	61.1	3153	36.5	208	2.4	8643	100.0
	4	6757	76.1	2042	23.0	78	0.9	8877	100.0
	5	5954	66.9	2826	31.8	119	1.3	8899	100.0
	6	7289	82.2	1547	17.5	27	0.3	8863	100.0
6	1	7747	85.1	1359	14.9	0	0.0	9106	100.0
	2	7553	88.4	976	11.4	13	0.2	8542	100.0
	3	6675	76.3	1974	22.6	103	1.2	8752	100.0
	4	7237	85.3	1225	14.4	27	0.3	8489	100.0
	5	6609	75.2	2147	24.4	34	0.4	8790	100.0
	6	6934	79.5	1734	19.9	52	0.6	8720	100.0
7	1	6025	74.2	2060	25.4	35	0.4	8120	100.0
	2	5690	71.2	2165	27.1	139	1.7	7994	100.0
	3	5584	71.0	2202	28.0	80	1.0	7866	100.0
	4	6371	78.3	1716	21.1	48	0.6	8135	100.0
	5	6094	76.6	1815	22.8	45	0.6	7954	100.0
	6	6146	77.1	1737	21.8	84	1.1	7967	100.0

**Table 4.31 The 2003 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 5**

Form	Item	Perfect		Adjacent		Discrepancy		Total	
		n	%	n	%	n	%	n	%
1	1	7021	70.9	2754	27.8	124	1.3	9899	100.0
	2	6553	66.4	3177	32.2	141	1.4	9871	100.0
	3	6517	66.4	3201	32.6	99	1.0	9817	100.0
	4	7530	75.9	2260	22.8	127	1.3	9917	100.0
	5	7536	76.5	2278	23.1	35	0.4	9849	100.0
	6	6340	65.1	3213	33.0	191	2.0	9744	100.0
2	1	6678	68.5	2973	30.5	101	1.0	9752	100.0
	2	7575	78.2	2089	21.6	25	0.3	9689	100.0
	3	6830	70.9	2765	28.7	32	0.3	9627	100.0
	4	6887	72.5	2541	26.8	68	0.7	9496	100.0
	5	6536	67.9	3001	31.2	83	0.9	9620	100.0
	6	7019	73.0	2512	26.1	90	0.9	9621	100.0
3	1	7535	77.8	2141	22.1	10	0.1	9686	100.0
	2	7301	76.0	2274	23.7	29	0.3	9604	100.0
	3	7855	83.0	1529	16.2	83	0.9	9467	100.0
	4	6733	70.1	2758	28.7	113	1.2	9604	100.0
	5	5897	61.4	3567	37.1	145	1.5	9609	100.0
	6	6975	72.3	2581	26.8	92	1.0	9648	100.0
4	1	5900	61.2	3613	37.5	131	1.4	9644	100.0
	2	6526	67.6	3045	31.5	84	0.9	9655	100.0
	3	7329	76.0	2230	23.1	79	0.8	9638	100.0
	4	6919	73.2	2505	26.5	32	0.3	9456	100.0
	5	7496	78.8	1994	21.0	17	0.2	9507	100.0
	6	5995	64.2	3076	32.9	268	2.9	9339	100.0
5	1	5509	57.3	3806	39.6	298	3.1	9613	100.0
	2	6415	67.6	2851	30.0	227	2.4	9493	100.0
	3	4967	52.2	4305	45.2	247	2.6	9519	100.0
	4	6649	69.8	2817	29.6	54	0.6	9520	100.0
	5	6503	67.8	3007	31.4	76	0.8	9586	100.0
	6	6622	71.9	2523	27.4	67	0.7	9212	100.0
6	1	6689	70.2	2799	29.4	38	0.4	9526	100.0
	2	6974	72.8	2568	26.8	32	0.3	9574	100.0
	3	7616	80.2	1867	19.7	17	0.2	9500	100.0
	4	7319	76.4	2228	23.3	27	0.3	9574	100.0
	5	7536	80.2	1832	19.5	28	0.3	9396	100.0
	6	6625	70.6	2690	28.7	65	0.7	9380	100.0
7	1	5717	65.5	2872	32.9	145	1.7	8734	100.0
	2	5791	66.6	2681	30.9	218	2.5	8690	100.0
	3	6093	71.0	2435	28.4	49	0.6	8577	100.0
	4	6461	73.5	2213	25.2	114	1.3	8788	100.0
	5	5497	63.0	3097	35.5	137	1.6	8731	100.0
	6	5440	63.1	2945	34.2	234	2.7	8619	100.0



**Table 4.32 The 2003 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 8**

Form	Item	Perfect		Adjacent		Discrepancy		Total	
		n	%	n	%	n	%	n	%
1	1	5839	62.8	3302	35.5	156	1.7	9297	100.0
	2	5627	61.2	3338	36.3	226	2.5	9191	100.0
	3	5273	58.8	3415	38.1	287	3.2	8975	100.0
	4	6166	66.4	3033	32.7	85	0.9	9284	100.0
	5	5932	62.9	3292	34.9	203	2.2	9427	100.0
	6	5096	55.3	3847	41.7	280	3.0	9223	100.0
2	1	6289	66.9	3023	32.2	84	0.9	9396	100.0
	2	6399	69.9	2705	29.6	45	0.5	9149	100.0
	3	6203	66.9	2964	32.0	100	1.1	9267	100.0
	4	5932	65.2	3062	33.6	111	1.2	9105	100.0
	5	5437	59.7	3502	38.5	164	1.8	9103	100.0
	6	5513	62.8	3079	35.1	185	2.1	8777	100.0
3	1	6423	68.0	2844	30.1	181	1.9	9448	100.0
	2	5403	56.8	3929	41.3	172	1.8	9504	100.0
	3	6526	70.0	2556	27.4	242	2.6	9324	100.0
	4	6358	67.0	2993	31.5	145	1.5	9496	100.0
	5	6203	65.9	2976	31.6	228	2.4	9407	100.0
	6	6917	74.7	2108	22.8	234	2.5	9259	100.0
4	1	5749	61.4	3403	36.4	207	2.2	9359	100.0
	2	6769	73.3	2425	26.2	46	0.5	9240	100.0
	3	5980	63.8	3242	34.6	147	1.6	9369	100.0
	4	6679	71.6	2629	28.2	21	0.2	9329	100.0
	5	6016	64.5	3125	33.5	193	2.1	9334	100.0
	6	6710	72.0	2558	27.5	47	0.5	9315	100.0
5	1	6243	67.6	2910	31.5	87	0.9	9240	100.0
	2	6265	68.3	2799	30.5	105	1.1	9169	100.0
	3	6458	69.7	2666	28.8	135	1.5	9259	100.0
	4	5621	60.6	3450	37.2	208	2.2	9279	100.0
	5	6023	64.3	3265	34.9	80	0.9	9368	100.0
	6	5380	58.5	3586	39.0	228	2.5	9194	100.0
6	1	6546	69.2	2803	29.6	107	1.1	9456	100.0
	2	5146	54.9	3789	40.5	432	4.6	9367	100.0
	3	4397	47.1	4263	45.6	683	7.3	9343	100.0
	4	6481	70.2	2706	29.3	49	0.5	9236	100.0
	5	7302	77.9	2057	21.9	16	0.2	9375	100.0
	6	5770	61.9	3428	36.8	127	1.4	9325	100.0
7	1	5988	65.2	3068	33.4	125	1.4	9181	100.0
	2	5837	64.8	2947	32.7	220	2.4	9004	100.0
	3	5433	61.3	3151	35.6	279	3.1	8863	100.0
	4	6208	67.4	2941	31.9	62	0.7	9211	100.0
	5	6561	70.3	2730	29.3	37	0.4	9328	100.0
	6	5762	62.8	3275	35.7	131	1.4	9168	100.0