

# APPENDIX E—TRANSFORMATION CONSTANTS FOR EXTREME LOW AND EXTREME HIGH SCORES

# LIST OF TABLES

<b>Table E-1. Grade Span 3–4 .....</b>	<b>3</b>
<b>Table E-2. Grade Span 5–6 .....</b>	<b>3</b>
<b>Table E-3. Grade Span 7–8 .....</b>	<b>4</b>
<b>Table E-4. Grade Span 9–12 .....</b>	<b>4</b>

**Table E-1. 2004–2008 MEPA:  
Transformation Constants—Grade Span 3–4**

Score Range	Sessions Taken		Fall 2004		Spring 2005		Fall 2005		Spring 2006		Fall 2006		Spring 2007		Fall 2007		Spring 2008	
	Reading	Writing	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept
300–305	1/2	1/2	1.90	307.61	1.91	307.65	1.91	307.65	1.92	307.67	1.92	307.67	1.90	307.60	1.91	307.65	1.92	307.67
	2/3	1/2	1.91	307.66	1.93	307.72	1.93	307.72	1.91	307.63	1.91	307.63	1.92	307.67	1.93	307.72	1.91	307.63
	1/2	2/3	1.92	307.69	1.90	307.60	1.90	307.60	1.92	307.68	1.92	307.68	1.91	307.65	1.90	307.60	1.92	307.68
395–400	2/3	2/3	1.90	307.60	1.92	307.67	1.92	307.67	1.91	307.63	1.91	307.63	1.93	307.74	1.92	307.67	1.91	307.63
	1/2	1/2	1.57	393.74	1.55	393.80	1.55	393.80	1.56	393.77	1.56	393.77	1.55	393.80	1.55	393.80	1.56	393.77
	2/3	1/2	1.56	393.77	1.56	393.77	1.56	393.77	1.54	393.84	1.54	393.84	1.55	393.82	1.56	393.77	1.54	393.84
	1/2	2/3	1.55	393.82	1.54	393.84	1.54	393.84	1.54	393.83	1.54	393.83	1.58	393.70	1.54	393.84	1.54	393.83
	2/3	2/3	1.54	393.84	1.55	393.81	1.55	393.81	1.56	393.75	1.56	393.75	1.57	393.72	1.55	393.81	1.56	393.75

Because all of the tests were pre-equated, scaling constants are the same across administrations.

**Table E-2. 2004–2008 MEPA:  
Transformation Constants—Grade Span 5–6**

Score Range	Sessions Taken		Fall 2004		Spring 2005		Fall 2005		Spring 2006		Fall 2006		Spring 2007		Fall 2007		Spring 2008	
	Reading	Writing	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept
300–305	1/2	1/2	1.87	307.48	1.86	307.45	1.86	307.45	1.88	307.53	1.88	307.53	1.88	307.54	1.86	307.45	1.88	307.53
	2/3	1/2	1.89	307.56	1.89	307.54	1.89	307.54	1.89	307.56	1.89	307.56	1.88	307.51	1.89	307.54	1.89	307.56
	1/2	2/3	1.88	307.53	1.89	307.56	1.89	307.56	1.87	307.49	1.87	307.49	1.88	307.53	1.89	307.56	1.87	307.49
	2/3	2/3	1.87	307.48	1.88	307.53	1.88	307.53	1.88	307.52	1.88	307.52	1.88	307.51	1.88	307.53	1.88	307.52
395–400	1/2	1/2	1.68	393.28	1.67	393.31	1.67	393.31	1.65	393.38	1.65	393.38	1.63	393.48	1.67	393.31	1.65	393.38
	2/3	1/2	1.62	393.50	1.62	393.51	1.62	393.51	1.63	393.48	1.63	393.48	1.63	393.48	1.62	393.51	1.63	393.48
	1/2	2/3	1.65	393.39	1.66	393.36	1.66	393.36	1.63	393.47	1.63	393.47	1.65	393.41	1.66	393.36	1.63	393.47
	2/3	2/3	1.66	393.37	1.62	393.51	1.62	393.51	1.62	393.53	1.62	393.53	1.64	393.43	1.62	393.51	1.62	393.53

Because all of the tests were pre-equated, scaling constants are the same across administrations.

**Table E-3. 2004–2008 MEPA:  
Transformation Constants—Grade Span 7–8**

Score Range	Sessions Taken		Fall 2004		Spring 2005		Fall 2005		Spring 2006		Fall 2006		Spring 2007		Fall 2007		Spring 2008	
	Reading	Writing	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept
300–305	1/2	1/2	1.74	306.95	1.74	306.98	1.74	306.98	1.73	306.92	1.73	306.92	1.74	306.96	1.74	306.98	1.73	306.92
	2/3	1/2	1.74	306.97	1.74	306.94	1.74	306.94	1.73	306.91	1.73	306.91	1.74	306.95	1.74	306.94	1.73	306.91
	1/2	2/3	1.73	306.90	1.74	306.95	1.74	306.95	1.75	307.00	1.75	307.00	1.74	306.97	1.74	306.95	1.75	307.00
	2/3	2/3	1.73	306.92	1.73	306.91	1.73	306.91	1.75	307.00	1.75	307.00	1.74	306.97	1.73	306.91	1.75	307.00
395–400	1/2	1/2	1.62	393.53	1.65	393.38	1.65	393.38	1.65	393.42	1.65	393.42	1.64	393.44	1.65	393.38	1.65	393.42
	2/3	1/2	1.64	393.44	1.63	393.47	1.63	393.47	1.63	393.49	1.63	393.49	1.63	393.47	1.63	393.47	1.63	393.49
	1/2	2/3	1.64	393.44	1.63	393.48	1.63	393.48	1.65	393.39	1.65	393.39	1.63	393.50	1.63	393.48	1.65	393.39
	2/3	2/3	1.62	393.53	1.65	393.38	1.65	393.38	1.64	393.45	1.64	393.45	1.62	393.51	1.65	393.38	1.64	393.45

Because all of the tests were pre-equated, scaling constants are the same across administrations.

**Table E-4. 2004–2008 MEPA:  
Transformation Constants—Grade Span 9–12**

Score Range	Sessions Taken		Fall 2004		Spring 2005		Fall 2005		Spring 2006		Fall 2006		Spring 2007		Fall 2007		Spring 2008	
	Reading	Writing	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept
300–305	1/2	1/2	1.61	306.42	1.60	306.41	1.60	306.41	1.61	306.43	1.61	306.43	1.61	306.44	1.60	306.41	1.61	306.43
	2/3	1/2	1.60	306.41	1.61	306.45	1.61	306.45	1.60	306.39	1.60	306.39	1.60	306.40	1.61	306.45	1.60	306.39
	1/2	2/3	1.61	306.43	1.61	306.44	1.61	306.44	1.61	306.46	1.61	306.46	1.59	306.37	1.61	306.44	1.61	306.46
	2/3	2/3	1.60	306.41	1.60	306.39	1.60	306.39	1.60	306.42	1.60	306.42	1.60	306.41	1.60	306.39	1.60	306.42
395–400	1/2	1/2	1.62	393.53	1.59	393.63	1.59	393.63	1.59	393.65	1.59	393.65	1.61	393.55	1.59	393.63	1.59	393.65
	2/3	1/2	1.59	393.66	1.61	393.55	1.61	393.55	1.60	393.60	1.60	393.60	1.59	393.65	1.61	393.55	1.60	393.60
	1/2	2/3	1.59	393.64	1.58	393.69	1.58	393.69	1.58	393.68	1.58	393.68	1.60	393.61	1.58	393.69	1.58	393.68
	2/3	2/3	1.60	393.60	1.59	393.62	1.59	393.62	1.59	393.63	1.59	393.63	1.58	393.68	1.59	393.62	1.59	393.63

Because all of the tests were pre-equated, scaling constants are the same across administrations.