

Appendix H
Factor Analysis

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Table H1
Total Variance Explained for Grade 3 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.174	17.459	17.459	10.423	16.286	16.286	5.795	9.054	9.054
2	1.952	3.050	20.509	1.189	1.858	18.144	5.008	7.826	16.880
3	1.436	2.244	22.753	0.916	1.431	19.575	1.193	1.865	18.744
4	1.260	1.969	24.722	0.532	0.831	20.406	0.815	1.273	20.018
5	1.197	1.870	26.592	0.447	0.699	21.104	0.695	1.087	21.104
6	1.178	1.840	28.432						
7	1.113	1.738	30.170						
8	1.096	1.713	31.884						
9	1.074	1.679	33.562						
10	1.057	1.652	35.214						
11	1.043	1.629	36.843						
12	1.026	1.602	38.446						
13	1.014	1.585	40.031						
14	0.998	1.560	41.591						
15	0.975	1.523	43.114						
16	0.963	1.505	44.619						
17	0.954	1.490	46.109						
18	0.953	1.488	47.598						
19	0.940	1.469	49.067						
20	0.928	1.450	50.517						
21	0.909	1.421	51.938						
22	0.901	1.408	53.346						
23	0.900	1.406	54.752						
24	0.883	1.380	56.132						
25	0.872	1.363	57.495						
26	0.864	1.349	58.844						
27	0.856	1.337	60.181						
28	0.845	1.321	61.502						
29	0.841	1.314	62.815						
30	0.825	1.289	64.104						
31	0.818	1.278	65.382						
32	0.811	1.267	66.649						
33	0.804	1.257	67.906						
34	0.792	1.237	69.143						
35	0.789	1.232	70.375						
36	0.778	1.216	71.591						
37	0.774	1.210	72.801						
38	0.761	1.189	73.990						
39	0.756	1.181	75.172						
40	0.753	1.177	76.348						
41	0.750	1.171	77.520						
42	0.741	1.158	78.678						
43	0.723	1.130	79.808						
44	0.719	1.123	80.932						

Table H1 (Cont.)
Total Variance Explained for Grade 3 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.710	1.110	82.041						
46	0.702	1.098	83.139						
47	0.689	1.077	84.216						
48	0.684	1.069	85.285						
49	0.683	1.068	86.353						
50	0.675	1.054	87.407						
51	0.660	1.031	88.438						
52	0.647	1.011	89.449						
53	0.644	1.006	90.456						
54	0.638	0.997	91.453						
55	0.629	0.983	92.436						
56	0.617	0.964	93.400						
57	0.609	0.952	94.351						
58	0.601	0.939	95.291						
59	0.579	0.905	96.195						
60	0.560	0.875	97.071						
61	0.534	0.835	97.905						
62	0.496	0.775	98.680						
63	0.430	0.671	99.352						
64	0.415	0.648	100.000						

Table H2
Factor Loadings – Grade 3 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
12	01		0.347			
34	01	0.393	0.250			
35	01		0.394			
36	01		0.365			
40	01		0.342			
41	01	0.379	0.366			
49	01	0.299	0.327			
50	01	0.399	0.241			
58A	01		0.272			
67	01					
68	01	0.323	0.317			
74	01	0.215				
76	01	0.531	0.254			
10	02/03		0.348			
14	02/03		0.241			
16	02/03		0.265			0.362
17	02/03		0.274			
32	02/03	0.338				
38A	02/03	0.316				
42	02/03					
47	02/03	0.295	0.275			
56	02/03		0.270			
57	02/03		0.349			
60	02/03	0.283	0.292			
62	02/03	0.491				
70	02/03		0.298			0.314
72A	02/03			0.661		
24	04/05		0.270			
37	04/05	0.272				
39	04/05	0.372	0.467			
43	04/05	0.231				
44	04/05	0.312	0.317			
48	04/05	0.488	0.297			
55	04/05		0.460			
63	04/05	0.238	0.288			
64	04/05	0.488				
69	04/05	0.440				
71	04/05	0.387	0.385			
73	04/05	0.257	0.425			
75	04/05		0.281			
77A	04/05		0.385		0.377	

Table H2 (Cont.)
Factor Loadings – Grade 3 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
1	06		0.209			
2	06		0.220			
4	06	0.211	0.259			
13	06	0.225	0.433			
18	06					
31A	06	0.388	0.248			
45A	06	0.528				0.251
46	06	0.465	0.218			
51	06	0.362	0.347			
52	06	0.315	0.412			
53	06	0.432				
54	06	0.203	0.352			
59	06		0.335			
61	06	0.252	0.320			
65	06	0.270	0.434			
66A	06	0.251				
31B	07	0.394	0.238			
38B	07	0.343				0.208
45B	07	0.575				0.306
58B	07	0.321			0.225	
66B	07	0.413			0.248	
72B	07	0.207		0.739		
77B	07	0.353	0.242		0.504	
% Variance Explained		9.054	7.826	1.865	1.273	1.087

Table H3
Total Variance Explained for Grade 3 Mathematics Form 2

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.324	17.694	17.694	10.604	16.569	16.569	4.883	7.629	7.629
2	1.932	3.018	20.712	1.148	1.794	18.364	3.117	4.870	12.499
3	1.428	2.231	22.943	0.719	1.124	19.487	3.092	4.831	17.330
4	1.260	1.969	24.912	0.605	0.945	20.432	1.382	2.160	19.490
5	1.230	1.922	26.834	0.526	0.821	21.253	1.128	1.763	21.253
6	1.210	1.890	28.724						
7	1.181	1.846	30.570						
8	1.165	1.821	32.390						
9	1.121	1.752	34.142						
10	1.085	1.695	35.838						
11	1.056	1.650	37.488						
12	1.051	1.642	39.130						
13	1.035	1.617	40.747						
14	1.034	1.616	42.363						
15	1.010	1.577	43.941						
16	1.000	1.562	45.503						
17	0.980	1.532	47.035						
18	0.965	1.507	48.542						
19	0.959	1.498	50.041						
20	0.947	1.480	51.521						
21	0.930	1.453	52.974						
22	0.916	1.432	54.406						
23	0.912	1.426	55.831						
24	0.898	1.403	57.234						
25	0.891	1.392	58.626						
26	0.886	1.384	60.010						
27	0.875	1.367	61.377						
28	0.852	1.331	62.708						
29	0.845	1.320	64.028						
30	0.830	1.297	65.325						
31	0.829	1.295	66.619						
32	0.822	1.284	67.903						
33	0.811	1.267	69.170						
34	0.792	1.237	70.407						
35	0.784	1.225	71.632						
36	0.769	1.202	72.833						
37	0.762	1.190	74.024						
38	0.759	1.185	75.209						
39	0.751	1.173	76.382						
40	0.741	1.158	77.540						
41	0.733	1.145	78.685						
42	0.726	1.134	79.819						
43	0.710	1.110	80.929						
44	0.708	1.106	82.036						

**Table H3 (Cont.)
Total Variance Explained for Grade 3 Mathematics Form 2**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.698	1.091	83.126						
46	0.675	1.055	84.182						
47	0.673	1.052	85.233						
48	0.663	1.036	86.269						
49	0.658	1.027	87.297						
50	0.644	1.006	88.303						
51	0.638	0.997	89.300						
52	0.625	0.977	90.277						
53	0.622	0.971	91.248						
54	0.612	0.956	92.204						
55	0.600	0.937	93.141						
56	0.589	0.921	94.062						
57	0.569	0.889	94.952						
58	0.558	0.872	95.824						
59	0.538	0.840	96.664						
60	0.486	0.759	97.423						
61	0.460	0.719	98.142						
62	0.428	0.668	98.810						
63	0.409	0.640	99.450						
64	0.352	0.550	100.000						

Table H4
Factor Loadings – Grade 3 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
12	01		0.284	0.234		
34	01	0.320	0.235			
35	01	0.418	0.350			
36	01			0.252		
40	01			0.319		
41	01	0.305	0.306	0.208		
49	01	0.275	0.206			
50	01	0.280				
58A	01			0.278		
67	01					
68	01	0.259	0.353			
70	01	0.319	0.269			
74	01			0.349		
10	02/03		0.275	0.313		
14	02/03					
16	02/03			0.273		
17	02/03					
32	02/03	0.311				
38A	02/03	0.418		0.232		
42	02/03					
44	02/03	0.353	0.220			
57	02/03		0.300	0.275		
60	02/03	0.221	0.283	0.213		
63	02/03					
64	02/03	0.429	0.323			
72A	02/03	0.208	0.415			0.557
76	02/03			0.342		
24	04/05			0.234		
37	04/05	0.287				
39	04/05	0.209	0.421	0.294	0.294	
43	04/05	0.256	0.492		0.276	
47	04/05	0.241		0.208		
48	04/05		0.238	0.387		
52	04/05			0.471		
55	04/05			0.452		
62	04/05	0.256		0.215		
69	04/05	0.392	0.213			
71	04/05	0.353	0.313		0.323	
73	04/05	0.281	0.263	0.290		
75	04/05			0.246		
77A	04/05	0.317	0.267		0.625	

Table H4 (Cont.)
Factor Loadings – Grade 3 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
1	06					
2	06					
4	06					
13	06		0.341	0.245		
18	06					
31A	06	0.373		0.203		
45A	06	0.271				
46	06	0.460				
51	06	0.442	0.275			
53	06	0.320	0.328	0.203		
54	06		0.207	0.258		
56	06		0.404	0.211		
59	06			0.221		
61	06	0.252	0.248			
65	06		0.226	0.313		
66A	06	0.433		0.231	0.217	
31B	07	0.468				
38B	07	0.464		0.251		
45B	07	0.456				
58B	07	0.448	0.211			0.219
66B	07	0.441		0.209	0.229	0.211
72B	07	0.346	0.261			0.620
77B	07	0.344			0.465	
% Variance Explained		7.629	4.870	4.831	2.160	1.763

Table H5
Total Variance Explained for Grade 4 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.872	20.432	20.432	12.181	19.335	19.335	5.732	9.098	9.098
2	1.798	2.854	23.286	1.085	1.723	21.058	5.189	8.236	17.334
3	1.450	2.301	25.587	0.785	1.246	22.303	1.941	3.082	20.415
4	1.246	1.978	27.565	0.676	1.073	23.376	1.245	1.976	22.391
5	1.226	1.947	29.512	0.571	0.907	24.283	1.192	1.892	24.283
6	1.191	1.890	31.402						
7	1.136	1.803	33.205						
8	1.099	1.745	34.951						
9	1.071	1.700	36.651						
10	1.038	1.648	38.299						
11	1.032	1.638	39.937						
12	1.006	1.596	41.533						
13	1.002	1.591	43.124						
14	0.969	1.538	44.662						
15	0.950	1.507	46.169						
16	0.933	1.481	47.650						
17	0.914	1.450	49.100						
18	0.907	1.439	50.540						
19	0.898	1.426	51.966						
20	0.892	1.416	53.382						
21	0.887	1.408	54.789						
22	0.879	1.395	56.184						
23	0.875	1.389	57.573						
24	0.868	1.378	58.951						
25	0.865	1.373	60.323						
26	0.846	1.342	61.666						
27	0.837	1.328	62.994						
28	0.823	1.306	64.300						
29	0.820	1.301	65.601						
30	0.814	1.292	66.893						
31	0.792	1.257	68.150						
32	0.785	1.246	69.396						
33	0.779	1.237	70.633						
34	0.767	1.218	71.852						
35	0.765	1.214	73.065						
36	0.753	1.195	74.260						
37	0.750	1.191	75.451						
38	0.736	1.168	76.619						
39	0.733	1.164	77.783						
40	0.725	1.151	78.934						
41	0.720	1.144	80.078						
42	0.707	1.122	81.200						
43	0.699	1.109	82.309						
44	0.696	1.104	83.413						

Table H5 (Cont.)
Total Variance Explained for Grade 4 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.683	1.084	84.496						
46	0.677	1.074	85.570						
47	0.673	1.068	86.639						
48	0.669	1.062	87.700						
49	0.652	1.035	88.735						
50	0.637	1.011	89.746						
51	0.633	1.004	90.751						
52	0.630	1.000	91.750						
53	0.608	0.966	92.716						
54	0.604	0.959	93.675						
55	0.593	0.942	94.617						
56	0.584	0.927	95.544						
57	0.566	0.898	96.442						
58	0.543	0.862	97.304						
59	0.522	0.828	98.133						
60	0.398	0.632	98.765						
61	0.299	0.474	99.239						
62	0.261	0.415	99.654						
63	0.218	0.346	100.000						

Table H6
Factor Loadings – Grade 4 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
35	01	0.220	0.351			
36	01	0.422	0.312			
37	01		0.322			
43	01	0.426	0.259			
44	01	0.341				
45	01			0.283		
51	01			0.389		
59	01		0.332			
61	01		0.291			
68A	01	0.455	0.243			
70	01					
76	01		0.472			
77	01		0.317			
78	01	0.357				
20	02/03	0.250	0.291			
31	02/03	0.367	0.246			
38	02/03	0.201	0.246			
39	02/03		0.331			
40A	02/03		0.216			
49	02/03		0.217	0.382		
50	02/03			0.560		
52	02/03	0.260		0.364		
56	02/03	0.310				
58	02/03	0.358	0.241			
69	02/03	0.205	0.308			
74A	02/03	0.444	0.271			0.681
75	02/03	0.394				
34	04/05	0.372	0.211			
41	04/05	0.272	0.322	0.241		
42	04/05	0.447	0.234			
46	04/05	0.393				
47A	04/05	0.318	0.324		0.658	
48	04/05		0.227	0.253		
62	04/05		0.375			
64	04/05		0.434			
65	04/05		0.527		0.201	
66	04/05		0.528			
67	04/05	0.233	0.408	0.254		
71	04/05	0.203	0.335			
72	04/05	0.367	0.260			
73	04/05		0.457			
79A	04/05	0.258	0.333	0.273		

Table H6 (Cont.)
Factor Loadings – Grade 4 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
1	06	0.233				
2	06	0.282				
3	06		0.292			
4	06	0.387				
10	06	0.368				
17	06		0.335			
18	06	0.344	0.216			
27	06	0.328				
33A	06		0.234			
53	06	0.223	0.290			
54	06	0.236	0.275			
55	06		0.318			
60A	06	0.605	0.201			
63	06		0.369			
33B	07	0.207	0.249			
40B	07	0.330	0.255			
47B	07	0.349	0.297	0.260	0.667	
60B	07	0.677	0.234			
68B	07	0.494	0.371	0.223		
74B	07	0.446	0.365			0.546
79B	07	0.339	0.279	0.248		
% Variance Explained		9.098	8.236	3.082	1.976	1.892

Table H7
Total Variance Explained for Grade 4 Mathematics Form 2

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.751	19.923	19.923	12.042	18.816	18.816	6.127	9.574	9.574
2	1.718	2.684	22.607	1.212	1.894	20.711	4.911	7.673	17.247
3	1.488	2.325	24.932	0.999	1.561	22.271	1.771	2.767	20.014
4	1.434	2.240	27.172	0.817	1.276	23.548	1.569	2.452	22.466
5	1.287	2.010	29.182	0.742	1.160	24.708	1.435	2.242	24.708
6	1.205	1.883	31.065						
7	1.186	1.854	32.919						
8	1.129	1.765	34.683						
9	1.113	1.739	36.422						
10	1.104	1.724	38.147						
11	1.087	1.698	39.845						
12	1.037	1.621	41.466						
13	1.024	1.601	43.067						
14	1.013	1.583	44.650						
15	0.979	1.530	46.180						
16	0.969	1.514	47.694						
17	0.954	1.491	49.186						
18	0.949	1.483	50.668						
19	0.945	1.476	52.145						
20	0.915	1.429	53.574						
21	0.908	1.419	54.993						
22	0.900	1.406	56.399						
23	0.888	1.387	57.786						
24	0.884	1.382	59.168						
25	0.869	1.359	60.526						
26	0.862	1.347	61.873						
27	0.847	1.324	63.197						
28	0.840	1.313	64.510						
29	0.824	1.287	65.797						
30	0.815	1.274	67.070						
31	0.808	1.262	68.332						
32	0.801	1.252	69.584						
33	0.782	1.221	70.805						
34	0.777	1.215	72.020						
35	0.770	1.203	73.223						
36	0.764	1.193	74.416						
37	0.756	1.181	75.597						
38	0.750	1.172	76.769						
39	0.746	1.166	77.934						
40	0.730	1.141	79.076						
41	0.727	1.135	80.211						
42	0.708	1.106	81.317						
43	0.702	1.096	82.413						
44	0.691	1.079	83.493						

**Table H7 (Cont.)
Total Variance Explained for Grade 4 Mathematics Form 2**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.675	1.054	84.547						
46	0.670	1.046	85.594						
47	0.665	1.039	86.632						
48	0.660	1.031	87.663						
49	0.649	1.014	88.676						
50	0.640	1.000	89.677						
51	0.631	0.987	90.663						
52	0.610	0.953	91.617						
53	0.607	0.948	92.565						
54	0.596	0.931	93.496						
55	0.580	0.907	94.403						
56	0.564	0.881	95.284						
57	0.549	0.858	96.142						
58	0.523	0.818	96.960						
59	0.439	0.686	97.645						
60	0.413	0.645	98.291						
61	0.350	0.547	98.838						
62	0.311	0.487	99.324						
63	0.290	0.453	99.777						
64	0.143	0.223	100.000						

Table H8
Factor Loadings – Grade 4 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
34	01	0.230	0.396			
37	01	0.415	0.353			
38	01		0.295			
39	01		0.310			
42	01	0.387	0.302			
43	01		0.211			
46	01		0.239		0.213	
59	01	0.393	0.351			
61	01	0.240	0.225			
68A	01	0.315	0.244			0.702
70	01	0.377				
76	01	0.266	0.287			
77	01	0.204	0.377			
78	01	0.376				
20	02/03	0.276	0.288			
31	02/03	0.362	0.254			
40A	02/03					
44	02/03	0.238	0.315			
45	02/03	0.311				
50	02/03				0.412	
51	02/03				0.659	
52	02/03				0.603	
55	02/03	0.310				
56	02/03	0.265	0.233			
57	02/03	0.433	0.247			
69	02/03	0.229	0.281			
74A	02/03	0.549				
75	02/03	0.452				
35	04/05		0.239			
36	04/05	0.280	0.274			
41	04/05	0.348	0.290	0.251		
47A	04/05	0.475	0.217			
48	04/05	0.394	0.260			
49	04/05	0.455				
62	04/05		0.380			
63	04/05	0.220	0.432			
64	04/05	0.365	0.298			
65	04/05	0.200	0.493			
67	04/05	0.214	0.377			
71	04/05	0.222	0.467			
72	04/05	0.421	0.223			
73	04/05		0.414			
79A	04/05	0.280	0.225	0.788		

Table H8 (Cont.)
Factor Loadings – Grade 4 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
1	06		0.257			
2	06	0.247	0.257			
3	06		0.286			
4	06	0.386				
10	06	0.359				
17	06		0.443			
18	06	0.304	0.272			
27	06	0.282	0.239			
33A	06	0.348	0.302			
53	06	0.242	0.311			
54	06		0.251			
58	06	0.218	0.246			
60A	06		0.207			
66	06	0.368				
33B	07	0.486	0.275			
40B	07	0.308	0.277			
47B	07	0.531	0.281			
60B	07	0.300	0.290			
68B	07	0.257	0.241			0.744
74B	07	0.579	0.229			
79B	07	0.303	0.233	0.872		
% Variance Explained		9.574	7.673	2.767	2.452	2.242

Table H9
Total Variance Explained for Grade 5 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.995	19.992	19.992	12.292	18.910	18.910	5.705	8.777	8.777
2	1.845	2.838	22.829	1.201	1.848	20.758	5.321	8.186	16.963
3	1.621	2.494	25.324	1.067	1.641	22.399	1.955	3.007	19.970
4	1.607	2.472	27.796	0.901	1.386	23.785	1.857	2.858	22.828
5	1.409	2.167	29.963	0.849	1.307	25.092	1.472	2.264	25.092
6	1.262	1.941	31.904						
7	1.213	1.867	33.771						
8	1.161	1.787	35.557						
9	1.118	1.720	37.277						
10	1.090	1.677	38.954						
11	1.079	1.659	40.613						
12	1.049	1.614	42.227						
13	1.008	1.551	43.779						
14	1.005	1.546	45.324						
15	0.986	1.516	46.841						
16	0.977	1.503	48.344						
17	0.959	1.475	49.819						
18	0.953	1.466	51.285						
19	0.939	1.444	52.729						
20	0.930	1.430	54.160						
21	0.914	1.407	55.566						
22	0.897	1.380	56.946						
23	0.893	1.374	58.320						
24	0.875	1.346	59.667						
25	0.866	1.333	60.999						
26	0.850	1.308	62.307						
27	0.848	1.305	63.611						
28	0.836	1.287	64.898						
29	0.823	1.266	66.164						
30	0.813	1.250	67.415						
31	0.804	1.237	68.652						
32	0.795	1.224	69.876						
33	0.784	1.206	71.082						
34	0.774	1.191	72.273						
35	0.768	1.181	73.454						
36	0.760	1.170	74.624						
37	0.759	1.168	75.792						
38	0.743	1.144	76.935						
39	0.734	1.130	78.065						
40	0.725	1.116	79.181						
41	0.723	1.112	80.293						
42	0.709	1.090	81.383						
43	0.707	1.088	82.471						
44	0.689	1.060	83.531						

Table H9 (Cont.)
Total Variance Explained for Grade 5 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.685	1.054	84.585						
46	0.673	1.036	85.621						
47	0.657	1.011	86.632						
48	0.646	0.994	87.626						
49	0.644	0.991	88.617						
50	0.639	0.983	89.599						
51	0.633	0.974	90.573						
52	0.620	0.954	91.527						
53	0.608	0.935	92.462						
54	0.604	0.930	93.392						
55	0.595	0.915	94.307						
56	0.567	0.872	95.179						
57	0.560	0.862	96.041						
58	0.468	0.720	96.762						
59	0.427	0.657	97.418						
60	0.424	0.652	98.070						
61	0.357	0.550	98.620						
62	0.341	0.524	99.144						
63	0.231	0.356	99.499						
64	0.172	0.264	99.763						
65	0.154	0.237	100.000						

Table H10
Factor Loadings – Grade 5 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
27	01	0.444	0.276			
28	01	0.253	0.267			
34	01	0.386	0.339			
35	01	0.421				
36	01					
39	01	0.309	0.210		0.230	
40A	01					0.684
46	01	0.221	0.229			
50	01		0.222	0.325		
63A	01	0.298			0.766	
65	01	0.270				
67	01	0.402	0.246			
71	01					0.604
73	01	0.248				
74	01	0.319		0.203		
13	02/03					
17	02/03					
23	02/03	0.448	0.289			
26	02/03	0.452	0.306			
37	02/03					
43	02/03		0.252			
44	02/03		0.298			
47A	02/03		0.560	0.244		
49	02/03			0.557		
52	02/03			0.290		
64A	02/03			0.302		
66	02/03	0.416				
69	02/03	0.411	0.291			
72	02/03	0.441	0.306			
12	04/05	0.410	0.230			
32	04/05	0.331				
33A	04/05	0.277	0.291			0.215
45	04/05	0.287		0.271		
51	04/05			0.521		
54	04/05	0.288	0.313			
55	04/05	0.309				
59	04/05					
61	04/05	0.357	0.287			
62	04/05	0.312				
68	04/05	0.342				
70A	04/05	0.214	0.509			
75	04/05	0.279	0.381			

Table H10 (Cont.)
Factor Loadings – Grade 5 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
2	06	0.370				
4	06	0.423				
6	06	0.350				
8	06	0.291	0.245			
31	06	0.398	0.300			
38	06	0.337	0.405			
41	06	0.261	0.327			
42	06	0.282		0.269		
48	06	0.334	0.320	0.256		
53	06	0.366				
56	06	0.317	0.250			
57A	06	0.234	0.511			
58	06	0.366				
60	06	0.433				
76A	06	0.210	0.586			
33B	07	0.289	0.275		0.203	0.241
40B	07	0.228	0.298			0.332
47B	07		0.656	0.295		
57B	07	0.264	0.476			
63B	07	0.266	0.223		0.785	
64B	07	0.209	0.251	0.300		
70B	07	0.230	0.488			
76B	07	0.236	0.616			
% Variance Explained		8.777	8.186	3.007	2.858	2.264

Table H11
Total Variance Explained for Grade 5 Mathematics Form 2

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.214	20.329	20.329	12.529	19.275	19.275	7.692	11.834	11.834
2	1.898	2.921	23.250	1.324	2.037	21.312	3.892	5.988	17.822
3	1.608	2.475	25.724	1.104	1.698	23.009	1.993	3.066	20.888
4	1.416	2.178	27.903	0.915	1.408	24.418	1.648	2.536	23.424
5	1.325	2.038	29.940	0.886	1.363	25.781	1.532	2.357	25.781
6	1.304	2.007	31.947						
7	1.210	1.862	33.809						
8	1.183	1.820	35.629						
9	1.151	1.770	37.399						
10	1.099	1.691	39.090						
11	1.091	1.679	40.769						
12	1.053	1.620	42.388						
13	1.030	1.585	43.973						
14	1.011	1.556	45.529						
15	0.997	1.534	47.064						
16	0.974	1.499	48.562						
17	0.955	1.470	50.032						
18	0.946	1.455	51.488						
19	0.942	1.450	52.938						
20	0.926	1.424	54.362						
21	0.925	1.424	55.786						
22	0.912	1.402	57.188						
23	0.897	1.380	58.568						
24	0.885	1.361	59.929						
25	0.877	1.349	61.278						
26	0.859	1.322	62.599						
27	0.847	1.303	63.903						
28	0.838	1.290	65.192						
29	0.836	1.286	66.478						
30	0.831	1.278	67.756						
31	0.812	1.250	69.006						
32	0.805	1.239	70.245						
33	0.800	1.230	71.475						
34	0.785	1.207	72.682						
35	0.777	1.195	73.876						
36	0.769	1.183	75.060						
37	0.767	1.180	76.240						
38	0.748	1.151	77.391						
39	0.733	1.128	78.519						
40	0.723	1.112	79.630						
41	0.717	1.103	80.733						
42	0.711	1.094	81.827						
43	0.706	1.086	82.913						
44	0.690	1.062	83.975						

**Table H11 (Cont.)
Total Variance Explained for Grade 5 Mathematics Form 2**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.677	1.042	85.017						
46	0.664	1.022	86.039						
47	0.662	1.019	87.058						
48	0.653	1.005	88.063						
49	0.651	1.002	89.065						
50	0.640	0.985	90.050						
51	0.623	0.959	91.009						
52	0.607	0.934	91.942						
53	0.600	0.923	92.865						
54	0.596	0.918	93.782						
55	0.578	0.889	94.671						
56	0.553	0.851	95.523						
57	0.535	0.824	96.346						
58	0.452	0.696	97.042						
59	0.403	0.620	97.662						
60	0.383	0.589	98.251						
61	0.304	0.467	98.719						
62	0.276	0.425	99.143						
63	0.218	0.336	99.479						
64	0.203	0.312	99.791						
65	0.136	0.209	100.000						

Table H12
Factor Loadings – Grade 5 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
27	01	0.508	0.204			
28	01	0.279	0.223			
34	01	0.524				
35	01	0.433				
37	01					
38	01	0.420				
40A	01	0.312	0.298			
46	01	0.262				
50	01	0.284	0.237			
63A	01					0.818
65	01	0.380				
67	01	0.434	0.261			
71	01	0.207				0.612
73	01	0.260				
74	01	0.427				
13	02/03	0.253				
17	02/03					
23	02/03	0.482	0.212			
26	02/03	0.407	0.304			
36	02/03					
43	02/03		0.266			
44	02/03		0.343			
47A	02/03	0.385	0.280	0.268		
49	02/03	0.249				
51	02/03	0.268	0.241			
64A	02/03		0.726			
66	02/03	0.410				
69	02/03	0.362	0.303			
72	02/03	0.466	0.212			
12	04/05	0.399				
32	04/05	0.373				
33A	04/05	0.275	0.202			
45	04/05	0.383				
52	04/05	0.317	0.234			
54	04/05	0.330				
55	04/05	0.315	0.230			
60	04/05	0.399				
61	04/05	0.347	0.241			
62	04/05	0.354				
68	04/05	0.368				
70A	04/05	0.302	0.411			
75	04/05	0.294	0.289			

Table H12 (Cont.)
Factor Loadings – Grade 5 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
2	06	0.451				
4	06	0.434				
6	06	0.422				
8	06	0.367				
31	06	0.438	0.215			
39	06	0.212				
41	06	0.313				
42	06	0.353				
48	06	0.338				
53	06	0.328				
56	06	0.438				
57A	06	0.208	0.274		0.805	
58	06	0.477				
59	06	0.371				
76A	06	0.252	0.263	0.780		
33B	07	0.249	0.209			
40B	07	0.450	0.433			
47B	07	0.483	0.300	0.257		
57B	07	0.293	0.296		0.740	
63B	07	0.230				0.347
64B	07		0.698			
70B	07	0.331	0.384			
76B	07	0.275	0.289	0.814		
% Variance Explained		11.834	5.988	3.066	2.536	2.357

Table H13
Total Variance Explained for Grade 6 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.887	24.011	24.011	14.239	22.965	22.965	6.670	10.758	10.758
2	1.896	3.058	27.069	1.238	1.997	24.962	6.479	10.450	21.208
3	1.367	2.204	29.273	0.903	1.457	26.419	1.639	2.643	23.851
4	1.298	2.093	31.367	0.830	1.339	27.758	1.542	2.487	26.338
5	1.184	1.910	33.277	0.598	0.964	28.722	1.478	2.384	28.722
6	1.138	1.836	35.113						
7	1.091	1.759	36.872						
8	1.039	1.676	38.549						
9	1.009	1.627	40.175						
10	0.992	1.600	41.775						
11	0.969	1.563	43.338						
12	0.958	1.544	44.882						
13	0.946	1.526	46.408						
14	0.934	1.507	47.915						
15	0.930	1.500	49.415						
16	0.909	1.467	50.882						
17	0.897	1.448	52.330						
18	0.881	1.420	53.750						
19	0.878	1.416	55.166						
20	0.870	1.403	56.569						
21	0.861	1.389	57.959						
22	0.854	1.377	59.336						
23	0.836	1.349	60.685						
24	0.825	1.330	62.015						
25	0.816	1.317	63.331						
26	0.806	1.300	64.632						
27	0.798	1.288	65.919						
28	0.793	1.279	67.198						
29	0.782	1.261	68.458						
30	0.779	1.257	69.715						
31	0.771	1.244	70.960						
32	0.768	1.239	72.199						
33	0.741	1.195	73.394						
34	0.741	1.194	74.588						
35	0.730	1.177	75.765						
36	0.727	1.172	76.938						
37	0.717	1.156	78.094						
38	0.708	1.142	79.235						
39	0.693	1.118	80.354						
40	0.686	1.106	81.459						
41	0.675	1.088	82.547						
42	0.666	1.074	83.622						
43	0.663	1.069	84.691						
44	0.650	1.049	85.740						

Table H13 (Cont.)
Total Variance Explained for Grade 6 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.643	1.036	86.777						
46	0.629	1.015	87.792						
47	0.628	1.013	88.804						
48	0.627	1.011	89.815						
49	0.614	0.990	90.805						
50	0.601	0.969	91.773						
51	0.590	0.952	92.726						
52	0.577	0.930	93.655						
53	0.572	0.922	94.578						
54	0.556	0.897	95.475						
55	0.538	0.868	96.343						
56	0.455	0.734	97.077						
57	0.428	0.691	97.768						
58	0.413	0.667	98.434						
59	0.299	0.483	98.917						
60	0.236	0.381	99.298						
61	0.233	0.376	99.674						
62	0.202	0.326	100.000						

Table H14
Factor Loadings – Grade 6 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
13	01		0.458			
36	01		0.497			
40A	01	0.292	0.285		0.711	
52	01	0.333				
54	01		0.233			
61	01	0.442	0.283			
65	01		0.509			
67	01	0.313	0.301			
68A	01		0.610			
72	01	0.337	0.343			
76	01	0.388	0.254			
77	01	0.272	0.389			
78	01	0.267	0.239			
79	01	0.298	0.459			
17	02/03	0.254	0.329			
37	02/03	0.505	0.314			
38	02/03	0.293	0.329			
41	02/03	0.230	0.235	0.206		
42	02/03	0.320	0.236			
46	02/03	0.243				
49A	02/03	0.293	0.237	0.736		
51	02/03	0.362	0.246			
55	02/03	0.492				
57	02/03	0.397	0.283	0.210		
69A	02/03	0.329				
73	02/03	0.350				
74	02/03	0.250				
80	02/03	0.357	0.300			
43	04/05		0.398			
44	04/05	0.333				
45	04/05	0.336	0.434			
47	04/05	0.457				
48	04/05	0.467				
50	04/05	0.286	0.222			
53	04/05	0.358				
56	04/05	0.209	0.203			
64	04/05		0.406			
66	04/05		0.350			
70	04/05		0.392			
71	04/05	0.260	0.232			
81A	04/05	0.316	0.455			

Table H14 (Cont.)
Factor Loadings – Grade 6 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
6	06	0.234	0.410			
18	06	0.265	0.402			
20	06	0.396	0.399			
32	06	0.387	0.322			
33	06	0.234	0.311			
34	06	0.329				
35	06	0.337				
39	06	0.289	0.313			
58	06	0.230	0.343			
59	06	0.449				
60	06	0.274	0.236			
62	06	0.266	0.277			
63A	06	0.376	0.220			0.721
75A	06	0.536	0.445			
40B	07	0.421	0.326		0.660	
49B	07	0.347	0.244	0.749		
63B	07	0.443	0.261			0.689
68B	07		0.486			
69B	07	0.499	0.367			
75B	07	0.501	0.475			
81B	07	0.334	0.502			
% Variance Explained		10.758	10.450	2.643	2.487	2.384

Table H15
Total Variance Explained for Grade 6 Mathematics Form 2

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.514	23.410	23.410	13.872	22.374	22.374	7.355	11.863	11.863
2	1.941	3.131	26.541	1.208	1.949	24.323	5.503	8.876	20.740
3	1.362	2.196	28.738	0.858	1.385	25.708	1.566	2.526	23.265
4	1.283	2.069	30.806	0.710	1.144	26.852	1.566	2.525	25.791
5	1.163	1.876	32.683	0.575	0.927	27.780	1.233	1.989	27.780
6	1.136	1.833	34.515						
7	1.118	1.803	36.319						
8	1.104	1.780	38.099						
9	1.050	1.694	39.793						
10	1.039	1.676	41.468						
11	1.020	1.646	43.114						
12	0.992	1.600	44.715						
13	0.970	1.564	46.279						
14	0.961	1.550	47.829						
15	0.949	1.531	49.359						
16	0.932	1.503	50.863						
17	0.915	1.475	52.338						
18	0.908	1.464	53.802						
19	0.890	1.435	55.237						
20	0.884	1.426	56.663						
21	0.872	1.406	58.069						
22	0.859	1.386	59.455						
23	0.838	1.352	60.807						
24	0.836	1.348	62.155						
25	0.823	1.327	63.482						
26	0.822	1.326	64.808						
27	0.807	1.301	66.108						
28	0.799	1.289	67.397						
29	0.782	1.262	68.659						
30	0.779	1.256	69.916						
31	0.757	1.221	71.136						
32	0.747	1.204	72.341						
33	0.739	1.192	73.533						
34	0.739	1.192	74.725						
35	0.728	1.173	75.898						
36	0.719	1.160	77.058						
37	0.712	1.148	78.206						
38	0.700	1.130	79.336						
39	0.695	1.121	80.457						
40	0.683	1.101	81.558						
41	0.678	1.093	82.651						
42	0.669	1.079	83.730						
43	0.661	1.067	84.797						
44	0.658	1.062	85.859						

**Table H15 (Cont.)
Total Variance Explained for Grade 6 Mathematics Form 2**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.644	1.038	86.897						
46	0.631	1.018	87.915						
47	0.614	0.990	88.905						
48	0.610	0.984	89.888						
49	0.606	0.977	90.865						
50	0.586	0.945	91.811						
51	0.577	0.930	92.741						
52	0.565	0.911	93.652						
53	0.557	0.898	94.550						
54	0.540	0.872	95.422						
55	0.506	0.817	96.239						
56	0.466	0.752	96.991						
57	0.424	0.683	97.674						
58	0.408	0.658	98.333						
59	0.301	0.486	98.818						
60	0.283	0.456	99.275						
61	0.247	0.398	99.673						
62	0.203	0.327	100.000						

Table H16
Factor Loadings – Grade 6 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor					
		1	2	3	4	5	
13	01	0.456					
35	01	0.501					
40A	01	0.374	0.250			0.735	
54	01	0.249	0.202				
55	01		0.263				
58	01	0.482					
66	01	0.506					
67	01	0.297	0.274				
68A	01	0.358	0.515				
73	01	0.361					
74	01	0.287	0.368				
78	01		0.222				
79	01	0.480	0.217				
80	01	0.470	0.222	0.216			
17	02/03	0.324					0.688
33	02/03	0.240					
37	02/03	0.349	0.450	0.217			
38	02/03	0.335	0.204	0.234			
41	02/03	0.250					
42	02/03	0.266	0.281				
43	02/03		0.298				
49A	02/03	0.275	0.240	0.261			
52	02/03		0.358				
57	02/03		0.298				
69A	02/03		0.272	0.270			
72	02/03						
76	02/03		0.216				
77	02/03	0.277		0.200			
44	04/05	0.479	0.242			0.402	
45	04/05	0.506					
47	04/05		0.440				
48	04/05		0.341				
50	04/05	0.384					
51	04/05	0.211	0.534				
53	04/05		0.337				
56	04/05	0.309		0.272			
61	04/05	0.391					
65	04/05	0.303					
70	04/05	0.380					
71	04/05	0.296		0.231			
81A	04/05	0.433	0.280				

Table H16 (Cont.)
Factor Loadings – Grade 6 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
6	06	0.503				
18	06	0.477	0.209			
20	06	0.477	0.325			
32	06	0.424	0.336			
34	06		0.311			
36	06	0.222	0.329			
39	06	0.369	0.253			
46	06	0.281	0.422			
59	06	0.426				
60	06	0.230	0.472			
62	06		0.220			
63A	06	0.438	0.406			
64	06	0.327	0.287			
75A	06	0.335	0.628			
40B	07	0.415	0.400			0.585
49B	07	0.299	0.344	0.256	0.725	
63B	07	0.514	0.272			
68B	07	0.411	0.286			
69B	07	0.315	0.440	0.345		
75B	07	0.453	0.571			
81B	07	0.443	0.295	0.420		
% Variance Explained		11.863	8.876	2.526	2.525	1.989

Table H17
Total Variance Explained for Grade 7 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.781	27.067	27.067	16.150	26.049	26.049	7.512	12.116	12.116
2	2.146	3.461	30.528	1.553	2.505	28.554	5.703	9.199	21.314
3	1.557	2.511	33.039	1.023	1.650	30.204	3.416	5.510	26.825
4	1.289	2.079	35.118	0.717	1.157	31.362	2.005	3.235	30.059
5	1.190	1.919	37.038	0.688	1.109	32.471	1.495	2.412	32.471
6	1.148	1.851	38.889						
7	1.096	1.767	40.656						
8	1.056	1.703	42.359						
9	1.046	1.688	44.047						
10	1.016	1.639	45.685						
11	0.989	1.595	47.281						
12	0.964	1.554	48.835						
13	0.943	1.522	50.357						
14	0.928	1.496	51.853						
15	0.910	1.467	53.321						
16	0.905	1.459	54.780						
17	0.884	1.427	56.206						
18	0.864	1.394	57.600						
19	0.848	1.368	58.969						
20	0.835	1.347	60.316						
21	0.831	1.340	61.657						
22	0.822	1.325	62.982						
23	0.811	1.308	64.290						
24	0.795	1.283	65.573						
25	0.785	1.265	66.839						
26	0.768	1.239	68.078						
27	0.753	1.215	69.293						
28	0.745	1.201	70.494						
29	0.737	1.189	71.682						
30	0.728	1.174	72.856						
31	0.717	1.157	74.013						
32	0.711	1.147	75.160						
33	0.699	1.128	76.288						
34	0.688	1.110	77.398						
35	0.683	1.102	78.500						
36	0.679	1.095	79.595						
37	0.672	1.084	80.678						
38	0.662	1.068	81.746						
39	0.649	1.047	82.793						
40	0.641	1.034	83.827						
41	0.631	1.018	84.844						
42	0.619	0.998	85.843						
43	0.618	0.996	86.839						
44	0.597	0.962	87.801						

Table H17 (Cont.)
Total Variance Explained for Grade 7 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.592	0.955	88.756						
46	0.580	0.935	89.691						
47	0.566	0.912	90.604						
48	0.554	0.893	91.497						
49	0.547	0.883	92.379						
50	0.522	0.842	93.221						
51	0.508	0.819	94.040						
52	0.487	0.785	94.825						
53	0.475	0.766	95.591						
54	0.459	0.740	96.331						
55	0.407	0.657	96.988						
56	0.350	0.565	97.553						
57	0.321	0.517	98.070						
58	0.314	0.507	98.577						
59	0.285	0.460	99.037						
60	0.242	0.391	99.428						
61	0.182	0.294	99.722						
62	0.173	0.278	100.000						

Table H18
Factor Loadings – Grade 7 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
44	01	0.327	0.266			
45	01	0.467	0.274			
46	01	0.312	0.247			
47	01	0.369				
48	01					
49	01	0.488	0.242			
64	01	0.273	0.396			
65	01	0.468		0.234		
68A	01	0.263	0.284		0.581	
70	01	0.313		0.222	0.254	
71	01	0.491	0.263		0.236	
72	01	0.392				
78	01	0.305	0.378		0.284	
81A	01	0.426	0.508			
24	02/03	0.506	0.349			
34	02/03	0.373		0.314		
35	02/03	0.341		0.240		
37	02/03	0.363	0.373	0.218		
39	02/03	0.374	0.355	0.237		
50	02/03	0.224		0.439		
51	02/03	0.298		0.370		
52	02/03	0.445	0.333			
53A	02/03	0.435		0.313		
55	02/03	0.388	0.388	0.219		
56	02/03	0.470	0.331	0.258		
76A	02/03	0.207	0.203	0.756		
77	02/03			0.464		
33A	04/05	0.517				
40	04/05	0.255	0.465			
41	04/05	0.444	0.202	0.252	0.216	0.206
42	04/05		0.264			
43A	04/05		0.375			0.711
58	04/05	0.378	0.235			
59	04/05		0.305			
60	04/05	0.310	0.467			
61	04/05	0.252	0.292			
63A	04/05		0.558			
67	04/05	0.408	0.312	0.247		
75	04/05					
79	04/05	0.218	0.381			
80	04/05	0.417		0.241		

Table H18 (Cont.)
Factor Loadings – Grade 7 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
3	06	0.378				
9	06	0.312				
13	06	0.390	0.391			
15	06		0.322			
32	06	0.392				
36	06	0.459				
38	06	0.295	0.250		0.205	
54	06	0.358	0.405			
57	06	0.478				
62	06	0.262				
66	06	0.386		0.219	0.236	
69	06	0.389	0.378			
73	06	0.258			0.220	
74	06	0.328		0.208	0.265	
33B	07	0.417	0.366		0.201	0.212
43B	07		0.417			0.677
53B	07	0.439	0.202	0.355		
63B	07		0.652			
68B	07	0.216	0.414		0.611	
76B	07	0.227	0.307	0.736		
81B	07	0.476	0.588			
% Variance Explained		12.116	9.199	5.510	3.235	2.412

Table H19
Total Variance Explained for Grade 7 Mathematics Form 2

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	17.003	27.424	27.424	16.376	26.413	26.413	6.340	10.227	10.227
2	1.923	3.101	30.526	1.315	2.121	28.535	4.953	7.988	18.215
3	1.461	2.357	32.882	1.022	1.648	30.182	3.841	6.195	24.410
4	1.405	2.266	35.148	0.818	1.320	31.502	3.173	5.117	29.527
5	1.253	2.022	37.170	0.606	0.977	32.479	1.830	2.952	32.479
6	1.153	1.860	39.030						
7	1.077	1.737	40.767						
8	1.052	1.697	42.464						
9	1.042	1.681	44.145						
10	0.994	1.604	45.749						
11	0.985	1.589	47.337						
12	0.970	1.565	48.902						
13	0.942	1.520	50.422						
14	0.915	1.476	51.898						
15	0.904	1.458	53.356						
16	0.895	1.444	54.800						
17	0.878	1.416	56.216						
18	0.871	1.405	57.621						
19	0.852	1.374	58.995						
20	0.848	1.368	60.363						
21	0.830	1.338	61.702						
22	0.815	1.315	63.016						
23	0.807	1.302	64.318						
24	0.793	1.280	65.598						
25	0.787	1.270	66.868						
26	0.774	1.249	68.117						
27	0.761	1.227	69.343						
28	0.748	1.206	70.550						
29	0.735	1.185	71.735						
30	0.721	1.163	72.898						
31	0.719	1.159	74.057						
32	0.707	1.140	75.197						
33	0.699	1.128	76.325						
34	0.688	1.109	77.434						
35	0.679	1.095	78.529						
36	0.670	1.080	79.609						
37	0.656	1.057	80.667						
38	0.644	1.039	81.706						
39	0.638	1.030	82.736						
40	0.634	1.023	83.758						
41	0.622	1.003	84.762						
42	0.611	0.985	85.747						
43	0.603	0.973	86.720						
44	0.596	0.962	87.682						

Table H19 (Cont.)
Total Variance Explained for Grade 7 Mathematics Form 2

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.583	0.940	88.622						
46	0.572	0.922	89.545						
47	0.555	0.895	90.440						
48	0.546	0.880	91.319						
49	0.534	0.861	92.181						
50	0.524	0.846	93.027						
51	0.518	0.835	93.862						
52	0.498	0.803	94.665						
53	0.487	0.786	95.451						
54	0.456	0.735	96.186						
55	0.441	0.711	96.897						
56	0.430	0.693	97.590						
57	0.403	0.651	98.241						
58	0.378	0.609	98.850						
59	0.197	0.317	99.167						
60	0.180	0.291	99.458						
61	0.178	0.286	99.744						
62	0.159	0.256	100.000						

Table H20
Factor Loadings – Grade 7 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
38	01	0.302	0.242			
41	01	0.252	0.423	0.272		
45	01	0.302	0.312	0.216		
47	01	0.308	0.307	0.352		
48	01	0.356	0.262	0.209		
51	01	0.341		0.202		
65	01	0.473	0.280			
67	01	0.402	0.341			
68A	01	0.379	0.328			
70	01		0.392			
71	01	0.347	0.482	0.246		
72	01		0.409			
80	01	0.264	0.481	0.269	0.233	
81A	01	0.293	0.220	0.538		
24	02/03	0.304	0.287	0.421		
35	02/03	0.410	0.241	0.338		
36	02/03		0.303		0.206	
44	02/03	0.352	0.254	0.285		
46	02/03	0.310		0.260		
49	02/03	0.422	0.212	0.307		
50	02/03		0.264		0.404	
52	02/03		0.214		0.438	
53A	02/03	0.232		0.203		0.756
56	02/03	0.287	0.353	0.370	0.220	0.207
57	02/03	0.279	0.221	0.340		0.283
76A	02/03	0.237			0.737	
77	02/03		0.234		0.441	
33A	04/05			0.313	0.254	
37	04/05	0.580				
39	04/05	0.260				
42	04/05		0.359	0.204	0.251	
43A	04/05	0.527		0.390	0.204	
58	04/05	0.303	0.247	0.256		
59	04/05	0.325				
60	04/05	0.429	0.214	0.334		
61	04/05	0.248				
63A	04/05	0.447				
64	04/05	0.379	0.357	0.261		
75	04/05	0.264	0.243			
78	04/05	0.342	0.442		0.200	
79	04/05	0.358	0.417		0.224	

Table H20 (Cont.)
Factor Loadings – Grade 7 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
3	06		0.360			
9	06	0.228	0.261			
13	06	0.420	0.239	0.321		
15	06	0.298				
32	06		0.275	0.319		
34	06	0.220	0.340	0.208		
40	06		0.372		0.245	
54	06	0.385	0.216	0.352		0.215
55	06					
62	06	0.226				
66	06	0.350	0.270			
69	06	0.257	0.283	0.367		
73	06		0.333			
74	06	0.235	0.443			
33B	07		0.258	0.302	0.314	
43B	07	0.616		0.428	0.211	
53B	07	0.270	0.226	0.223	0.252	0.750
63B	07	0.609			0.222	
68B	07	0.298	0.393		0.230	
76B	07	0.342			0.736	
81B	07	0.383	0.272	0.550		
% Variance Explained		10.227	7.988	6.195	5.117	2.952

Table H21
Total Variance Explained for Grade 8 Mathematics Form 1

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.890	24.828	24.828	15.271	23.861	23.861	7.144	11.162	11.162
2	2.284	3.569	28.397	1.670	2.609	26.470	5.409	8.451	19.614
3	1.415	2.211	30.607	0.820	1.281	27.751	3.006	4.697	24.311
4	1.275	1.992	32.600	0.772	1.206	28.957	2.053	3.208	27.519
5	1.173	1.833	34.433	0.635	0.992	29.949	1.555	2.430	29.949
6	1.137	1.776	36.209						
7	1.097	1.715	37.924						
8	1.057	1.652	39.576						
9	1.047	1.636	41.212						
10	1.027	1.605	42.816						
11	0.995	1.555	44.372						
12	0.985	1.539	45.910						
13	0.961	1.502	47.412						
14	0.955	1.492	48.904						
15	0.938	1.466	50.369						
16	0.926	1.448	51.817						
17	0.908	1.419	53.236						
18	0.901	1.408	54.644						
19	0.887	1.386	56.030						
20	0.877	1.370	57.399						
21	0.867	1.355	58.755						
22	0.857	1.338	60.093						
23	0.848	1.324	61.417						
24	0.831	1.299	62.716						
25	0.830	1.296	64.013						
26	0.820	1.282	65.294						
27	0.816	1.275	66.569						
28	0.811	1.267	67.836						
29	0.806	1.259	69.096						
30	0.788	1.231	70.327						
31	0.784	1.225	71.551						
32	0.772	1.206	72.758						
33	0.770	1.204	73.962						
34	0.760	1.188	75.150						
35	0.754	1.178	76.328						
36	0.737	1.152	77.479						
37	0.734	1.146	78.626						
38	0.722	1.128	79.754						
39	0.715	1.118	80.871						
40	0.701	1.096	81.967						
41	0.695	1.085	83.052						
42	0.686	1.072	84.124						
43	0.672	1.050	85.174						
44	0.655	1.023	86.197						

**Table H21 (Cont.)
Total Variance Explained for Grade 8 Mathematics Form 1**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.651	1.017	87.213						
46	0.635	0.993	88.206						
47	0.621	0.970	89.176						
48	0.603	0.942	90.117						
49	0.589	0.920	91.038						
50	0.579	0.905	91.943						
51	0.557	0.870	92.812						
52	0.532	0.832	93.644						
53	0.529	0.826	94.470						
54	0.522	0.816	95.286						
55	0.498	0.778	96.064						
56	0.467	0.730	96.794						
57	0.427	0.668	97.462						
58	0.339	0.530	97.992						
59	0.276	0.431	98.423						
60	0.243	0.379	98.802						
61	0.222	0.347	99.149						
62	0.198	0.310	99.459						
63	0.194	0.303	99.762						
64	0.152	0.238	100.000						

Table H22
Factor Loadings – Grade 8 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
21	01		0.273			
29	01		0.254			
36	01	0.335				0.260
40A	01	0.355	0.229			0.621
42	01			0.211		
45	01	0.267	0.247			
48	01	0.549				
49	01		0.307	0.358	0.231	
55	01	0.288				
56	01	0.372	0.206			
59	01	0.293	0.404	0.239	0.221	
61	01	0.221	0.263	0.225	0.260	
62A	01	0.247	0.261	0.250	0.635	
65	01	0.411				
76A	01	0.592	0.238			
16	02/03		0.323	0.278		
27	02/03	0.293	0.362			
33	02/03	0.360	0.205			
34	02/03	0.262	0.208			
35	02/03		0.259			
38	02/03	0.327				
41	02/03	0.236	0.263			
47A	02/03	0.575	0.202		0.289	
50	02/03	0.248	0.277	0.216		
54	02/03	0.362				
58	02/03	0.496	0.265			
70A	02/03	0.407				
74	02/03	0.442	0.424		0.202	
13	04/05					
32A	04/05	0.325	0.632		0.218	
39	04/05		0.303	0.239		
43	04/05	0.206	0.558		0.216	
51	04/05	0.248	0.269			
52	04/05	0.223	0.236			
57A	04/05	0.431	0.430			
63	04/05	0.238	0.213			
67	04/05	0.206	0.400	0.227		
68	04/05	0.208	0.257			
69	04/05	0.269				
72	04/05		0.312	0.404		
73	04/05	0.217	0.411	0.259		
75A	04/05			0.742		

Table H22 (Cont.)
Factor Loadings – Grade 8 Mathematics Form 1 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
2	06	0.322				
3	06	0.390				
6	06	0.269	0.294			
7	06	0.227	0.316			
20	06	0.412				
26	06		0.296			
37	06	0.258	0.317			
44	06	0.358	0.374			
46	06	0.361	0.287			0.208
53	06	0.409				
60	06	0.484				
64	06	0.346				
66	06	0.245	0.241		0.221	
71	06	0.383	0.459			
32B	07	0.284	0.573		0.237	
40B	07	0.458	0.271	0.202		0.705
47B	07	0.606	0.287	0.265	0.345	
57B	07	0.494	0.487			0.219
62B	07	0.229	0.235	0.313	0.659	
70B	07	0.482				
75B	07			0.756		
76B	07	0.583	0.248	0.255		
% Variance Explained		11.162	8.451	4.697	3.208	2.430

Table H23
Total Variance Explained for Grade 8 Mathematics Form 2

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.145	25.226	25.226	15.524	24.257	24.257	6.503	10.162	10.162
2	1.818	2.840	28.067	1.136	1.774	26.031	6.037	9.433	19.595
3	1.467	2.292	30.359	1.064	1.662	27.693	2.860	4.469	24.064
4	1.362	2.128	32.487	0.906	1.415	29.109	2.146	3.353	27.417
5	1.258	1.965	34.452	0.718	1.121	30.230	1.800	2.813	30.230
6	1.207	1.886	36.338						
7	1.130	1.766	38.104						
8	1.091	1.705	39.808						
9	1.072	1.675	41.483						
10	1.041	1.626	43.110						
11	1.022	1.597	44.707						
12	0.996	1.556	46.262						
13	0.979	1.529	47.791						
14	0.974	1.522	49.313						
15	0.947	1.480	50.793						
16	0.920	1.437	52.230						
17	0.917	1.433	53.663						
18	0.902	1.409	55.072						
19	0.891	1.392	56.464						
20	0.881	1.377	57.840						
21	0.869	1.359	59.199						
22	0.865	1.351	60.550						
23	0.855	1.337	61.886						
24	0.835	1.304	63.190						
25	0.830	1.298	64.488						
26	0.821	1.282	65.770						
27	0.816	1.275	67.046						
28	0.806	1.260	68.306						
29	0.796	1.244	69.550						
30	0.778	1.215	70.765						
31	0.772	1.206	71.970						
32	0.752	1.175	73.145						
33	0.741	1.158	74.303						
34	0.737	1.151	75.454						
35	0.725	1.132	76.586						
36	0.719	1.124	77.710						
37	0.711	1.111	78.821						
38	0.702	1.097	79.919						
39	0.692	1.081	81.000						
40	0.679	1.060	82.060						
41	0.676	1.056	83.117						
42	0.664	1.037	84.154						
43	0.655	1.023	85.177						
44	0.643	1.005	86.182						

**Table H23 (Cont.)
Total Variance Explained for Grade 8 Mathematics Form 2**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
45	0.641	1.002	87.184						
46	0.623	0.974	88.157						
47	0.609	0.951	89.108						
48	0.595	0.929	90.038						
49	0.581	0.908	90.946						
50	0.564	0.881	91.827						
51	0.547	0.855	92.681						
52	0.530	0.828	93.509						
53	0.521	0.814	94.323						
54	0.511	0.798	95.122						
55	0.504	0.787	95.909						
56	0.461	0.721	96.629						
57	0.412	0.643	97.272						
58	0.382	0.596	97.869						
59	0.341	0.533	98.402						
60	0.300	0.469	98.871						
61	0.205	0.321	99.191						
62	0.192	0.301	99.492						
63	0.182	0.285	99.777						
64	0.143	0.223	100.000						

Table H24
Factor Loadings – Grade 8 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
21	01		0.311			
29	01	0.245	0.221			
39	01	0.320	0.223		0.272	
40A	01	0.307	0.220		0.657	
44	01	0.270	0.297			
46	01		0.278			
48	01	0.215	0.423			
50	01	0.475	0.388		0.235	
53	01	0.329				
55	01	0.380				
58	01	0.437				
61	01	0.211	0.377			
62A	01	0.508	0.336		0.205	
64	01	0.395				
76A	01	0.396	0.261	0.287	0.360	
16	02/03		0.415			
27	02/03	0.275	0.426			
33	02/03	0.234	0.267	0.231		
34	02/03	0.290				
35	02/03		0.362			
36	02/03		0.305			
37	02/03	0.284				
47A	02/03	0.257		0.778		
51	02/03	0.312	0.534			
56	02/03	0.213		0.478		
60	02/03	0.355	0.264			
70A	02/03		0.286	0.270		
73	02/03	0.207	0.354	0.442		
13	04/05		0.222			
32A	04/05	0.291	0.273			0.788
38	04/05		0.341			
45	04/05		0.408			
49	04/05	0.496	0.203			0.260
52	04/05	0.226	0.211			
57A	04/05		0.538			0.201
63	04/05	0.364				
66	04/05	0.291	0.391			
68	04/05		0.419			
69	04/05	0.287	0.248			
71	04/05	0.200	0.392			
74	04/05	0.340	0.399			
75A	04/05	0.538	0.313			

Table H24 (Cont.)
Factor Loadings – Grade 8 Mathematics Form 2 (Rotated Factor Matrix)

Item	Content Standard	Factor				
		1	2	3	4	5
2	06	0.332				
3	06	0.427				
6	06	0.274	0.283			
7	06	0.259	0.305			
20	06	0.315		0.204		
26	06	0.263				
41	06	0.368				
42	06	0.461				
43	06	0.417	0.239		0.237	
54	06	0.285	0.243	0.202		
59	06	0.459		0.254		
65	06	0.377				
67	06	0.250	0.327			
72	06	0.500	0.338			
32B	07	0.329	0.267			0.798
40B	07	0.364	0.335		0.744	
47B	07	0.391	0.312	0.659		
57B	07	0.212	0.496	0.207		
62B	07	0.371	0.478			
70B	07		0.419			
75B	07	0.464	0.400			
76B	07	0.349	0.381	0.298	0.377	
% Variance Explained		10.162	9.433	4.469	3.353	2.813