

Appendix A: Alignment Study

Table A.1 The CLT 10 Test Structure

SECTION	NUMBER OF QUESTIONS	TIME
Verbal Reasoning	40	40 min
Grammar/Writing	40	35 min
Quantitative Reasoning	40	45 min

Table A.2: The PSAT Test Structure

SECTION	NUMBER OF QUESTIONS	TIME
Reading	47	60 min
Writing and Language	44	35 min
Math (No Calculator)	17	25 min
Math (With Calculator)	31	40 min

Table A.3 The Blueprint for the CLT10 Verbal Reasoning Section

SECTION	DOMAIN	SUBDOMAIN
Verbal Reasoning (40 questions)	Comprehension (27 questions)	Passage as a Whole (8 questions)
		Passage Details (7 questions)
		Passage Relationships (8 questions)
	Analysis (13 questions)	Textual Analysis (8 questions)
		Interpretation of Evidence (5 questions)

Table A.4 The Blueprint for the PSAT Reading Test (Averages) 1

SECTION	DOMAIN	SUBDOMAIN
Verbal Reasoning (47 questions)	Comprehension (26.25 questions)	Passage as a Whole (10.75 questions)
		Passage Details (15.5 questions)
		Passage Relationships (0 questions)
	Analysis (20.75 questions)	Textual Analysis (6.75 questions)
		Interpretation of Evidence (14 questions)

Table A.5 The Blueprint for the CLT10 Grammar/Writing Section

SECTION	DOMAIN	SUBDOMAIN
Grammar/Writing (40 questions)	Grammar (20 questions)	Agreement (10 questions)
		Punctuation and Sentence Structure (10 questions)
	Writing (20 questions)	Structure (8 questions)
		Style (8 questions)
		Word Choice (4 questions)
		Quantitative Analysis (0 questions)

1 Data available upon request

Table A.6 The Blueprint for the PSAT Writing and Language Test (Average)

SECTION	DOMAIN	SUBDOMAIN
Grammar/Writing (44 questions)	Grammar (15.5 questions)	Agreement (4.5 questions)
		Punctuation and Sentence Structure (11 questions)
	Writing (28.5 questions)	Structure (11.25 questions)
		Style (8.75 questions)
		Word Choice (7 questions)
		Quantitative Analysis (1.5 questions)

Table A.7 The Blueprint for the CLT10 Quantitative Reasoning Section

SECTION	DOMAIN	SUBDOMAIN
Quantitative Reasoning (40 questions)	Algebra (10 questions)	Arithmetic and Operations (5 questions)
		Algebraic Expressions and Equations (5 questions)
	Geometry (14 questions)	Plane Geometry (4 questions)
		Properties of Shapes (10 questions)
		Mathematical Reasoning (16 questions)
		Logic (8 questions)
		Word Problems (8 questions)
		Statistics (0 questions)

Table A.8 The Blueprint for the PSAT Math Section (Average)

SECTION	DOMAIN	SUBDOMAIN
Quantitative Reasoning (48 questions)	Algebra (16.75 questions)	Arithmetic and Operations (1.25 questions)
		Algebraic Expressions and Equations (15 questions)
	Geometry (7.75 questions)	Plane Geometry (4.75 questions)
		Properties of Shapes (3 questions)
	Mathematical Reasoning (23.25 questions)	Logic (<1 question)
		Word Problems (12.75 questions)
		Statistics (10.25 questions)

Appendix B: Screenshot for running the LEGS program

Equating Program - LEGS 2.0.1

File Window

Raw Scores as Input | Frequency Distributions as Input

X Scores :

Alphanumeric Identifier : CLT10

Column for X Score : 1

Lowest Score : 38

Highest Score : 117

File ... 9/LEGS_wg_v20/clt-raw.txt

Y Scores :

Alphanumeric Identifier : PSAT

Column for Y Score : 2

Lowest Score : 720

Highest Score : 1520

Subgroups :

Number of Subgroups : 1

Names of Subgroups : CLT

Number of examinees in each subgroup : 220

Equipercntile Smoothing

slim : 0.5

number of Smoothing Values : 2

List of Smoothing Values : 0.3
1

Truncation

Lowest Valid Score(Y) : 20

Highest Valid Score(Y) : 20

Truncation : 1

Options

remsd_wts : Comb. groups

Read Parameters from Control File

OK

Appendix C: CLT10 Score Frequencies

The CLT 10 score frequency for linking

SCORE	FREQUENCY	PERCENT	VALID PERCENT	CUMULATIVE PERCENT	SCORE	FREQUENCY	PERCENT	VALID PERCENT	CUMULATIVE PERCENT
38	1	0.5	0.5	0.5	84	4	1.8	1.8	48.6
41	1	0.5	0.5	0.9	85	4	1.8	1.8	50.5
46	1	0.5	0.5	1.4	86	5	2.3	2.3	52.7
50	2	0.9	0.9	2.3	87	3	1.4	1.4	54.1
53	1	0.5	0.5	2.7	88	3	1.4	1.4	55.5
54	1	0.5	0.5	3.2	89	5	2.3	2.3	57.7
60	1	0.5	0.5	3.6	90	5	2.3	2.3	60.0
61	5	2.3	2.3	5.9	91	6	2.7	2.7	62.7
63	4	1.8	1.8	7.7	92	4	1.8	1.8	64.5
64	2	0.9	0.9	8.6	93	8	3.6	3.6	68.2
65	1	0.5	0.5	9.1	94	5	2.3	2.3	70.5
66	3	1.4	1.4	10.5	95	7	3.2	3.2	73.6
67	3	1.4	1.4	11.8	96	9	4.1	4.1	77.7
68	4	1.8	1.8	13.6	97	6	2.7	2.7	80.5
69	5	2.3	2.3	15.9	98	3	1.4	1.4	81.8
70	1	0.5	0.5	16.4	99	2	0.9	0.9	82.7
71	3	1.4	1.4	17.7	100	2	0.9	0.9	83.6
72	4	1.8	1.8	19.5	101	3	1.4	1.4	85.0
73	5	2.3	2.3	21.8	102	3	1.4	1.4	86.4
74	3	1.4	1.4	23.2	103	4	1.8	1.8	88.2
75	4	1.8	1.8	25.0	104	2	0.9	0.9	89.1
76	5	2.3	2.3	27.3	105	6	2.7	2.7	91.8
77	4	1.8	1.8	29.1	107	1	0.5	0.5	92.3
78	5	2.3	2.3	31.4	109	5	2.3	2.3	94.5
79	7	3.2	3.2	34.5	111	7	3.2	3.2	97.7
80	6	2.7	2.7	37.3	112	2	0.9	0.9	98.6
81	4	1.8	1.8	39.1	116	2	0.9	0.9	99.5
82	8	3.6	3.6	42.7	117	1	0.5	0.5	100.0
83	9	4.1	4.1	46.8	Total	220	100.0	100.0	

Appendix D: CLT10 and PSAT Percentile Rankings

10TH GRADE PERCENTILES			10TH GRADE PERCENTILES			10TH GRADE PERCENTILES		
TOTAL SCORE	NATIONALLY REPRESENTATIVE SAMPLE	PSAT/NMSQT AND PSAT 10 USER	TOTAL SCORE	NATIONALLY REPRESENTATIVE SAMPLE	PSAT/NMSQT AND PSAT 10 USER	TOTAL SCORE	NATIONALLY REPRESENTATIVE SAMPLE	PSAT/NMSQT AND PSAT 10 USER
1520	99+	99+	1100	82	81	680	3	5
1510	99+	99+	1090	81	80	670	2	4
1500	99+	99+	1080	79	78	660	2	4
1490	99+	99+	1070	78	77	650	1	3
1480	99+	99+	1060	76	76	640	1	2
1470	99+	99+	1050	75	74	630	1	2
1460	99+	99+	1040	73	72	620	1	2
1450	99+	99+	1030	71	71	610	1-	1
1440	99+	99+	1020	69	69	600	1-	1
1430	99+	99	1010	67	67	590	1-	1
1420	99	99	1000	65	66	580	1-	1
1410	99	99	990	63	64	570	1-	1
1400	99	99	980	62	62	560	1-	1
1390	99	99	970	60	60	550	1-	1
1380	99	99	960	58	58	540	1-	1-
1370	99	99	950	56	56	530	1-	1-
1360	99	98	940	54	54	520	1-	1-
1350	98	98	930	52	53	510	1-	1-
1340	98	98	920	50	51	500	1-	1-
1330	98	98	910	48	49	490	1-	1-
1320	98	98	900	46	47	480	1-	1-
1310	97	97	890	44	45	470	1-	1-
1300	97	97	880	42	43	460	1-	1-
1290	97	97	870	40	41	450	1-	1-
1280	97	96	860	38	38	440	1-	1-
1270	96	96	850	36	36	430	1-	1-
1260	96	95	840	33	34	420	1-	1-
1250	95	95	830	31	32	410	1-	1-
1240	95	94	820	28	30	400	1-	1-
1230	94	94	810	26	28	390	1-	1-
1220	94	93	800	24	26	380	1-	1-

1210	93	93	790	22	24	370	1-	1-
1200	92	92	780	19	22	360	1-	1-
1190	91	91	770	17	20	350	1-	1-
1180	91	90	760	15	18	340	1-	1-
1170	90	89	750	13	16	330	1-	1-
1160	89	88	740	11	14	320	1-	1-
1150	88	87	730	9	12			
1140	87	86	720	8	10	Mean Score	939	934
1130	86	85	710	6	9			
1120	84	84	700	5	7	Standard Deviation	170	180
1110	83	83	690	4	6			

Appendix E: Assessment of Spelling on the CLT10

SEVERAL U.S. STATES INCLUDE A requirement that students be tested on spelling for their education, whether public, charter, private, at-home, or parochial, to be legally recognized. North Carolina’s legal formulation is characteristic of such requirements: “The nationally standardized test or other equivalent measurement selected must measure achievement in the areas of English grammar, reading, spelling, and mathematics. Each school shall make and maintain records of the results achieved by its students. For one year after testing, all records shall be made available, subject to G.S. 115C-174.13, at the principal office of such school, at all reasonable times, for annual inspection by a duly authorized representative of the State of North Carolina.” (Quoted from G.S. 115C-549.)

The Grammar/Writing section of each CLT-suite exam normally contains one or more questions requiring students to distinguish the correct answer based on spelling, though there is not a dedicated section of the exam testing spelling alone. The following examples, taken from the CLT8 practice test available on the main CLT site, are typical of the variety and extent of spelling examination on all three tests in the CLT exam suite.

- 49. witch
 - A) NO CHANGE
 - B) whether
 - C) wich
 - D) which

- 68. Kenyas
 - A) NO CHANGE
 - B) Kenya’s
 - C) Kenyas’
 - D) Kenya

According to the blueprint for CLT-suite exams, all tests (including the CLT10) contain one to three questions that distinguish the correct answer partly or exclusively via spelling. Additional questions may combine spelling, meaning, and context as indicators of the correct answer.