

JOB NUMBER: A2305 (RERUN OF A0085)
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DESCRIPTION: SAMPLE LONG IAP

MEASUREMENT AND RESEARCH CENTER
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THE FOLLOWING IS PROVIDED TO AID IN THE INTERPRETATION OF THE OUTPUT.

** TEST SCORE DISTRIBUTION **

"RAW SCORE" IS THE TOTAL NUMBER OF (NON-OMITTED) ITEMS A STUDENT ANSWERED CORRECTLY.
"WTD SCORE" (WEIGHTED SCORE) IS THE SUM OF THE WEIGHTS ASSIGNED TO EACH (NON-OMITTED) ITEM THE STUDENT ANSWERED CORRECTLY.
FOR TEST THAT HAVE NO WEIGHTED ITEMS, THE WEIGHTED SCORE IS THE SAME AS THE RAW SCORE.
"FREQUENCY" IS THE NUMBER OF STUDENTS WHO OBTAINED THE CORRESPONDING RAW OR WEIGHTED SCORE.
"CUMULATIVE FREQUENCY" IS TOTAL NUMBER OF STUDENTS WHO RECEIVED A SCORE AT OR BELOW THE CORRESPONDING RAW OR WEIGHTED SCORE.
"PERCENTILE RANK" IS THE PERCENTAGE OF STUDENTS WHO RECEIVED A SCORE AT OR BELOW THE CORRESPONDING RAW OR WEIGHTED SCORE.
"STANDARD SCORE" IS THE RAW OR WEIGHTED SCORE CONVERTED TO A Z SCORE. THE Z SCORES THAT MARC CALCULATES HAVE BEEN TRANSFORMED SO THAT THE STANDARD SCORE DISTRIBUTION HAS A MEAN OF 50 AND STANDARD DEVIATION OF 10.

** SUMMARY STATISTICS **

"MEAN" IS THE AVERAGE OF ALL SCORES.
"MEDIAN" IS THE POINT BELOW WHICH AND ABOVE WHICH FIFTY PERCENT OF THE SCORES LIE.
"MODE" IS THE MOST FREQUENTLY OCCURRING SCORE. NO MODE WILL BE CALCULATED IF MORE THAN ONE SCORE OCCURS MOST FREQUENTLY.
"STANDARD DEVIATION" DESCRIBES THE VARIABILITY OF THE TEST SCORES.
"SKEWNESS" IS THE DEGREE TO WHICH THE FREQUENCY DISTRIBUTION OR CURVE DEPARTS FROM A SYMMETRICAL SHAPE.
"KURTOSIS" IS THE RELATIVE DEGREE OF FLATNESS OR PEAKEDNESS OF THE PART OF A FREQUENCY CURVE THAT LIES NEAR THE MODE, AS COMPARED WITH THAT PART OF THE NORMAL CURVE.
"MAXIMUM" AND "MINIMUM" ARE THE HIGHEST AND LOWEST OBTAINED SCORES, RESPECTIVELY.

** ITEM ANALYSIS **

"ITEM MSG" CONTAINS A MESSAGE IF THE PERCENTAGE OF STUDENTS ANSWERING CORRECTLY IS LESS THAN 25% OR LESS THAN 10%, OR IF THE ITEM IS AN "OMIT" OR A "MULT" ON THE ANSWER KEY.
"TOTAL CORRECT" IS THE TOTAL NUMBER OF STUDENTS ANSWERING THE ITEM CORRECTLY.
"UPPER" REFERS TO THE TOP 27.5 PERCENT OF THE CASES AND "LOWER" TO THE BOTTOM 27.5 (UNLESS OTHERWISE SPECIFIED).
"A B C D E" REFER TO RESPONSE OPTIONS. THE STARRED ("****") OPTION IS THE CORRECT RESPONSE AS GRIDDED ON THE SCORING KEY. THE NUMBER UNDER EACH OPTION IS THE TOTAL NUMBER OF STUDENTS IN EACH GROUP MAKING THAT RESPONSE AND THE NUMBER IN PARENTHESES ARE THE PERCENTAGE IN EACH GROUP MAKING THAT CHOICE.
"BLNK" IS THE NUMBER OF STUDENTS WHO DID NOT ANSWER THE ITEM (OR GAVE MULTIPLE ANSWERS). "ERR" IS THE NUMBER OF INVALID RESPONSES (IF NOT ZERO, THE DATA MUST BE CLOSELY EXAMINED TO DETERMINE THE CAUSE OF THE ERROR).
"REL DIFF" IS THE RELATIVE DIFFICULTY OF THE ITEM AND IS THE PERCENTAGE OF STUDENTS MISSING THE ITEM (THE HIGHER THE PERCENTAGE, THE MORE DIFFICULT THE ITEM).
"PHI COEFF" (PHI COEFFICIENT) DESCRIBES THE RELATIONSHIP BETWEEN THE ITEM AND THE UPPER/LOWER GROUPS, WHERE GROUPS ARE DEFINED AS THE TOP 27.5 PERCENT OF THE SCORES (UPPER) AND THE LOWEST 27.5 PERCENT OF THE SCORES (LOWER).
"SIG" IS THE SIGNIFICANCE OF THE ITEM-GROUP RELATIONSHIP (PHI), AND IS THE PROBABILITY OF OBTAINING THE OBSERVED PHI VALUE BY CHANCE ALONE.
"PT BISER" (POINT-BISERIAL) DESCRIBES THE CORRELATION BETWEEN STUDENT SUCCESS ON THE ITEM AND STUDENT SUCCESS ON THE TEST. GENERALLY, THE CLOSER THE VALUE IS TO POSITIVE ONE, THE BETTER THE ITEM. ITEMS WITH VALUES CLOSE TO 0, AND ESPECIALLY NEGATIVE VALUES, MAY BE ITEMS THAT ARE POORLY WRITTEN OR ARE OTHERWISE POOR MEASURES OF STUDENT LEARNING.
"OBTAINED D" IS THE DISCRIMINATION INDEX. IT REFLECTS THE DEGREE TO WHICH THE ITEM DISCRIMINATES BETWEEN THE UPPER AND LOWER GROUPS.
"MAX" IS THE HIGHEST DISCRIMINATION INDEX WHICH COULD BE EXPECTED, HYPOTHETICALLY, BETWEEN THE UPPER AND LOWER GROUPS.
"EFF" IS THE EFFICIENCY OF THIS ITEM AND IS THE RATIO OF THE OBTAINED D TO THE MAXIMUM D.

** SUMMARY STATISTICS **

"KR 20" IS A MEASURE OF THE INTERNAL CONSISTENCY OF THE TEST AND IS A FUNCTION OF THE NUMBER OF ITEMS ON THE TEST, THE VARIABILITY OF THE SCORES, AND THE PROPORTION OF CORRECT AND INCORRECT RESPONSES FOR EACH ITEM.
"STANDARD ERROR OF MEASUREMENT" IS A FUNCTION OF THE TEST'S STANDARD DEVIATION AND RELIABILITY (AS MEASURED BY KR 20). IT INDICATES THE MAGNITUDE OF ERROR IN EACH TEST SCORE IN TERMS OF TEST POINTS.

THE FORMAT OF THIS REPORT WAS MODELED ON A REPORT DEVELOPED BY AND BELONGING TO DR. DAVID D. S. POOR.

DESCRIPTION OF TEST AND PROCESSING OPTIONS

TEST DESCRIPTION

FORM: BLUE CLASSROOM EXAM (5 RESPONSE OPTIONS)

NUMBER OF ITEMS ON TEST = 50
NUMBER OF STUDENTS = 30

UPPER GROUP CUTOFF FOR PHI ADJUSTED TO EQUALIZE N'S:

UPPER GROUP RAW SCORES >= 33
LOWER GROUP RAW SCORES <= 24

OUTPUT OPTIONS

REPORT TYPE: LONG
STUDENT SCORE LISTINGS: -ALPHA -SCORE -Tuid
RESPONSE LISTS AND PROFILES
EXPORT FILES: -SUMMARY EXCEL -RAW DATA FILE (LONG)

PROCESSING OPTIONS

ITEMS WITH MULTIPLE RESPONSES

41: ANY NON-BLANK ANSWER
42: CD
45: ABC
47: BC

OMITTED ITEMS

29 - 30: OMIT

WEIGHTED ITEMS

1 - 50: 2 PTS.

TEST SCORE DISTRIBUTION

ALL ITEMS, WEIGHTED SCORE

WTD SCORE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENTILE RANK	STANDARD SCORE
96	1	30	100.0	77.6
78	1	29	96.7	64.3
76	3	28	93.3	62.8
74	1	25	83.3	61.4
72	2	24	80.0	59.9
64	1	22	73.3	54.0
62	2	21	70.0	52.5
60	2	19	63.3	51.0
58	1	17	56.7	49.6
56	2	16	53.3	48.1
54	3	14	46.7	46.6
50	2	11	36.7	43.7
48	3	9	30.0	42.2
46	1	6	20.0	40.7
44	1	5	16.7	39.2
42	2	4	13.3	37.8
40	2	2	6.7	36.3

SUMMARY STATISTICS

NUMBER OF ITEMS ON TEST 50
NUMBER OF STUDENTS 30

MEAN 58.60
MEDIAN 56
MODE NONE

STANDARD DEVIATION 13.56
STANDARD SCORE MEAN 50.00
STANDARD SCORE S. D. 10.00

SKEWNESS 0.69
KURTOSIS -0.03

MAXIMUM 96
MINIMUM 40
RANGE 56

TEST SCORE HISTOGRAM

HISTOGRAM 'X' AXIS SCALE: 100%

ALL ITEMS, WEIGHTED SCORE



ITEM	STATISTICS		MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()						
1	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR
	N=22	PCT=73.3	7***	1	0	0	0	0	0
	PHI COEF=	.245 (SIG=.20)	(88)	(13)	(0)	(0)	(0)	(0)	(0)
	PT.BISER=	.216 (ITEM-TOTAL)	6***	2	1	0	0	0	0
	DISCRIMINATION INDICES	(PCT)	(67)	(22)	(11)	(0)	(0)	(0)	(0)
	OBTAINED D=	20.8	22***	5	2	1	0	0	0
	MAX=	45.8 EFF= 45.5	(73)	(17)	(7)	(3)	(0)	(0)	(0)
2	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR
	N=19	PCT=63.3	1	7***	0	0	0	0	0
	PHI COEF=	.127 (SIG=N.S.)	(13)	(88)	(0)	(0)	(0)	(0)	(0)
	PT.BISER=	.207 (ITEM-TOTAL)	1	7***	1	0	0	0	0
	DISCRIMINATION INDICES	(PCT)	(11)	(78)	(11)	(0)	(0)	(0)	(0)
	OBTAINED D=	9.7	7	19***	4	0	0	0	0
	MAX=	34.7 EFF= 28.0	(23)	(63)	(13)	(0)	(0)	(0)	(0)
3	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR
	N=16	PCT=53.3	1	7***	0	0	0	0	0
	PHI COEF=	.450 (SIG=.02)	(13)	(88)	(0)	(0)	(0)	(0)	(0)
	PT.BISER=	.386 (ITEM-TOTAL)	0	4***	5	0	0	0	0
	DISCRIMINATION INDICES	(PCT)	(0)	(44)	(56)	(0)	(0)	(0)	(0)
	OBTAINED D=	43.1	6	16***	8	0	0	0	0
	MAX=	68.1 EFF= 63.3	(20)	(53)	(27)	(0)	(0)	(0)	(0)
4	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR
	N=17	PCT=56.7	0	8***	0	0	0	0	0
	PHI COEF=	.889 (SIG=.001)	(0)	(100)	(0)	(0)	(0)	(0)	(0)
	PT.BISER=	.624 (ITEM-TOTAL)	1	1***	5	2	0	0	0
	DISCRIMINATION INDICES	(PCT)	(11)	(11)	(56)	(22)	(0)	(0)	(0)
	OBTAINED D=	88.9	1	17***	9	2	0	1	0
	MAX=	88.9 EFF= 100.0	(3)	(57)	(30)	(7)	(0)	(3)	(0)
5	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR
	N=22	PCT=73.3	0	2	6***	0	0	0	0
	PHI COEF=	.091 (SIG=N.S.)	(0)	(25)	(75)	(0)	(0)	(0)	(0)
	PT.BISER=	.171 (ITEM-TOTAL)	0	1	6***	0	2	0	0
	DISCRIMINATION INDICES	(PCT)	(0)	(11)	(67)	(0)	(22)	(0)	(0)
	OBTAINED D=	8.3	0	5	22***	0	2	1	0
	MAX=	58.3 EFF= 14.3	(0)	(17)	(73)	(0)	(7)	(3)	(0)
6	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR
	N=23	PCT=76.7	0	1	7***	0	0	0	0
	PHI COEF=	.127 (SIG=N.S.)	(0)	(13)	(88)	(0)	(0)	(0)	(0)
	PT.BISER=	.222 (ITEM-TOTAL)	0	1	7***	1	0	0	0
	DISCRIMINATION INDICES	(PCT)	(0)	(11)	(78)	(11)	(0)	(0)	(0)
	OBTAINED D=	9.7	0	6	23***	1	0	0	0
	MAX=	34.7 EFF= 28.0	(0)	(20)	(77)	(3)	(0)	(0)	(0)

ITEM	STATISTICS	MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()							
7	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=15 PCT=50.0 .500 UPPER	1	2	5***	0	0	0	0	
	PHI COEF= .292 (SIG=.20) (PCT)	(13)	(25)	(63)	(0)	(0)	(0)	(0)	
	PT.BISER= .251 (ITEM-TOTAL) LOWER	2	3	3***	0	1	0	0	
	DISCRIMINATION INDICES (PCT)	(22)	(33)	(33)	(0)	(11)	(0)	(0)	
	OBTAINED D= 29.2 TOTAL	3	11	15***	0	1	0	0	
	MAX= 95.8 EFF= 30.4 (PCT)	(10)	(37)	(50)	(0)	(3)	(0)	(0)	
8	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=11 PCT=36.7 .633 UPPER	2	4***	2	0	0	0	0	
	PHI COEF= .056 (SIG=N.S.) (PCT)	(25)	(50)	(25)	(0)	(0)	(0)	(0)	
	PT.BISER= .201 (ITEM-TOTAL) LOWER	4	4***	0	0	1	0	0	
	DISCRIMINATION INDICES (PCT)	(44)	(44)	(0)	(0)	(11)	(0)	(0)	
	OBTAINED D= 5.6 TOTAL	14	11***	2	2	1	0	0	
	MAX= 94.4 EFF= 5.9 (PCT)	(47)	(37)	(7)	(7)	(3)	(0)	(0)	
9	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=12 PCT=40.0 .600 UPPER	5***	2	1	0	0	0	0	
	PHI COEF= .408 (SIG=.05) (PCT)	(63)	(25)	(13)	(0)	(0)	(0)	(0)	
	PT.BISER= .375 (ITEM-TOTAL) LOWER	2***	1	6	0	0	0	0	
	DISCRIMINATION INDICES (PCT)	(22)	(11)	(67)	(0)	(0)	(0)	(0)	
	OBTAINED D= 40.3 TOTAL	12***	5	13	0	0	0	0	
	MAX= 84.7 EFF= 47.5 (PCT)	(40)	(17)	(43)	(0)	(0)	(0)	(0)	
10	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=16 PCT=53.3 .467 UPPER	1	1	6***	0	0	0	0	
	PHI COEF= .310 (SIG=.10) (PCT)	(13)	(13)	(75)	(0)	(0)	(0)	(0)	
	PT.BISER= .308 (ITEM-TOTAL) LOWER	0	0	4***	5	0	0	0	
	DISCRIMINATION INDICES (PCT)	(0)	(0)	(44)	(56)	(0)	(0)	(0)	
	OBTAINED D= 30.6 TOTAL	1	1	16***	11	0	1	0	
	MAX= 80.6 EFF= 37.9 (PCT)	(3)	(3)	(53)	(37)	(0)	(3)	(0)	
11	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=16 PCT=53.3 .467 UPPER	0	1	2	5***	0	0	0	
	PHI COEF= .181 (SIG=N.S.) (PCT)	(0)	(13)	(25)	(63)	(0)	(0)	(0)	
	PT.BISER= .199 (ITEM-TOTAL) LOWER	0	0	1	4***	4	0	0	
	DISCRIMINATION INDICES (PCT)	(0)	(0)	(11)	(44)	(44)	(0)	(0)	
	OBTAINED D= 18.1 TOTAL	0	1	3	16***	9	1	0	
	MAX= 93.1 EFF= 19.4 (PCT)	(0)	(3)	(10)	(53)	(30)	(3)	(0)	
12	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=19 PCT=63.3 .367 UPPER	1	0	1	0	6***	0	0	
	PHI COEF= .648 (SIG=.001) (PCT)	(13)	(0)	(13)	(0)	(75)	(0)	(0)	
	PT.BISER= .421 (ITEM-TOTAL) LOWER	0	2	1	5	1***	0	0	
	DISCRIMINATION INDICES (PCT)	(0)	(22)	(11)	(56)	(11)	(0)	(0)	
	OBTAINED D= 63.9 TOTAL	1	2	2	6	19***	0	0	
	MAX= 86.1 EFF= 74.2 (PCT)	(3)	(7)	(7)	(20)	(63)	(0)	(0)	

ITEM	STATISTICS			MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()						
13	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=17	PCT=56.7	.433	UPPER	1	0	0	7***	0	0
	PHI COEF=	.887	(SIG=.001)	(PCT)	(13)	(0)	(0)	(88)	(0)	(0)
	PT.BISER=	.575	(ITEM-TOTAL)	LOWER	0	2	6	0***	1	0
	DISCRIMINATION INDICES		(PCT)	(0)	(22)	(67)	(0)	(11)	(0)	(0)
	OBTAINED D=	87.5		TOTAL	1	3	7	17***	1	0
	MAX=	87.5	EFF= 100.0	(PCT)	(3)	(10)	(23)	(57)	(3)	(0)
14	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=20	PCT=66.7	.333	UPPER	0	0	8***	0	0	0
	PHI COEF=	.789	(SIG=.001)	(PCT)	(0)	(0)	(100)	(0)	(0)	(0)
	PT.BISER=	.511	(ITEM-TOTAL)	LOWER	2	5	2***	0	0	0
	DISCRIMINATION INDICES		(PCT)	(22)	(56)	(22)	(0)	(0)	(0)	(0)
	OBTAINED D=	77.8		TOTAL	3	7	20***	0	0	0
	MAX=	77.8	EFF= 100.0	(PCT)	(10)	(23)	(67)	(0)	(0)	(0)
15	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=20	PCT=66.7	.333	UPPER	1	7***	0	0	0	0
	PHI COEF=	.653	(SIG=.001)	(PCT)	(13)	(88)	(0)	(0)	(0)	(0)
	PT.BISER=	.501	(ITEM-TOTAL)	LOWER	4	2***	2	0	1	0
	DISCRIMINATION INDICES		(PCT)	(44)	(22)	(22)	(0)	(11)	(0)	(0)
	OBTAINED D=	65.3		TOTAL	6	20***	3	0	1	0
	MAX=	90.3	EFF= 72.3	(PCT)	(20)	(67)	(10)	(0)	(3)	(0)
16	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=19	PCT=63.3	.367	UPPER	6***	2	0	0	0	0
	PHI COEF=	.417	(SIG=.05)	(PCT)	(75)	(25)	(0)	(0)	(0)	(0)
	PT.BISER=	.319	(ITEM-TOTAL)	LOWER	3***	4	1	0	1	0
	DISCRIMINATION INDICES		(PCT)	(33)	(44)	(11)	(0)	(11)	(0)	(0)
	OBTAINED D=	41.7		TOTAL	19***	9	1	0	1	0
	MAX=	91.7	EFF= 45.5	(PCT)	(63)	(30)	(3)	(0)	(3)	(0)
17	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=15	PCT=50.0	.500	UPPER	0	6***	2	0	0	0
	PHI COEF=	.310	(SIG=.10)	(PCT)	(0)	(75)	(25)	(0)	(0)	(0)
	PT.BISER=	.241	(ITEM-TOTAL)	LOWER	1	4***	4	0	0	0
	DISCRIMINATION INDICES		(PCT)	(11)	(44)	(44)	(0)	(0)	(0)	(0)
	OBTAINED D=	30.6		TOTAL	2	15***	13	0	0	0
	MAX=	80.6	EFF= 37.9	(PCT)	(7)	(50)	(43)	(0)	(0)	(0)
18	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=16	PCT=53.3	.467	UPPER	1	1	5***	1	0	0
	PHI COEF=	.537	(SIG=.01)	(PCT)	(13)	(13)	(63)	(13)	(0)	(0)
	PT.BISER=	.367	(ITEM-TOTAL)	LOWER	1	4	1***	3	0	0
	DISCRIMINATION INDICES		(PCT)	(11)	(44)	(11)	(33)	(0)	(0)	(0)
	OBTAINED D=	51.4		TOTAL	3	7	16***	4	0	0
	MAX=	73.6	EFF= 69.8	(PCT)	(10)	(23)	(53)	(13)	(0)	(0)

ITEM	STATISTICS	MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()							
19	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=19 PCT=63.3 .367 UPPER	0	0	1	6***	1	0	0	
	PHI COEF= .528 (SIG=.01) (PCT)	(0)	(0)	(13)	(75)	(13)	(0)	(0)	
	PT.BISER= .350 (ITEM-TOTAL) LOWER	1	1	3	2***	1	1	0	
	DISCRIMINATION INDICES (PCT)	(11)	(11)	(33)	(22)	(11)	(11)	(0)	
	OBTAINED D= 52.8 TOTAL	1	2	5	19***	2	1	0	
	MAX= 97.2 EFF= 54.3 (PCT)	(3)	(7)	(17)	(63)	(7)	(3)	(0)	
20	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=19 PCT=63.3 .367 UPPER	0	0	0	7***	1	0	0	
	PHI COEF= .450 (SIG=.02) (PCT)	(0)	(0)	(0)	(88)	(13)	(0)	(0)	
	PT.BISER= .401 (ITEM-TOTAL) LOWER	1	2	2	4***	0	0	0	
	DISCRIMINATION INDICES (PCT)	(11)	(22)	(22)	(44)	(0)	(0)	(0)	
	OBTAINED D= 43.1 TOTAL	1	2	4	19***	2	2	0	
	MAX= 68.1 EFF= 63.3 (PCT)	(3)	(7)	(13)	(63)	(7)	(7)	(0)	
21	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=21 PCT=70.0 .300 UPPER	0	0	0	0	8***	0	0	
	PHI COEF= .609 (SIG=.001) (PCT)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	
	PT.BISER= .501 (ITEM-TOTAL) LOWER	1	0	0	3	4***	1	0	
	DISCRIMINATION INDICES (PCT)	(11)	(0)	(0)	(33)	(44)	(11)	(0)	
	OBTAINED D= 55.6 TOTAL	1	0	2	4	21***	2	0	
	MAX= 55.6 EFF= 100.0 (PCT)	(3)	(0)	(7)	(13)	(70)	(7)	(0)	
22	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=21 PCT=70.0 .300 UPPER	0	1	1	6***	0	0	0	
	PHI COEF= .203 (SIG=N.S.) (PCT)	(0)	(13)	(13)	(75)	(0)	(0)	(0)	
	PT.BISER= .168 (ITEM-TOTAL) LOWER	1	0	2	5***	0	1	0	
	DISCRIMINATION INDICES (PCT)	(11)	(0)	(22)	(56)	(0)	(11)	(0)	
	OBTAINED D= 19.4 TOTAL	1	2	5	21***	0	1	0	
	MAX= 69.4 EFF= 28.0 (PCT)	(3)	(7)	(17)	(70)	(0)	(3)	(0)	
23	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=23 PCT=76.7 .233 UPPER	0	2	6***	0	0	0	0	
	PHI COEF= .310 (SIG=.10) (PCT)	(0)	(25)	(75)	(0)	(0)	(0)	(0)	
	PT.BISER= .269 (ITEM-TOTAL) LOWER	2	3	4***	0	0	0	0	
	DISCRIMINATION INDICES (PCT)	(22)	(33)	(44)	(0)	(0)	(0)	(0)	
	OBTAINED D= 30.6 TOTAL	2	5	23***	0	0	0	0	
	MAX= 80.6 EFF= 37.9 (PCT)	(7)	(17)	(77)	(0)	(0)	(0)	(0)	
24	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=19 PCT=63.3 .367 UPPER	0	5***	2	0	1	0	0	
	PHI COEF= .070 (SIG=N.S.) (PCT)	(0)	(63)	(25)	(0)	(13)	(0)	(0)	
	PT.BISER= .054 (ITEM-TOTAL) LOWER	1	5***	2	0	1	0	0	
	DISCRIMINATION INDICES (PCT)	(11)	(56)	(22)	(0)	(11)	(0)	(0)	
	OBTAINED D= 6.9 TOTAL	4	19***	5	0	2	0	0	
	MAX= 81.9 EFF= 8.5 (PCT)	(13)	(63)	(17)	(0)	(7)	(0)	(0)	

ITEM	STATISTICS	MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()							
25	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=13 PCT=43.3 .567 UPPER	0	2	0	0	6***	0	0	
	PHI COEF= .648 (SIG=.001) (PCT)	(0)	(25)	(0)	(0)	(75)	(0)	(0)	
	PT.BISER= .467 (ITEM-TOTAL) LOWER	4	2	2	0	1***	0	0	
	DISCRIMINATION INDICES (PCT)	(44)	(22)	(22)	(0)	(11)	(0)	(0)	
	OBTAINED D= 63.9 TOTAL	4	9	4	0	13***	0	0	
	MAX= 86.1 EFF= 74.2 (PCT)	(13)	(30)	(13)	(0)	(43)	(0)	(0)	
26	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=14 PCT=46.7 .533 UPPER	1	6***	1	0	0	0	0	
	PHI COEF=-.033 (SIG=N.S.) (PCT)	(13)	(75)	(13)	(0)	(0)	(0)	(0)	
	PT.BISER= .047 (ITEM-TOTAL) LOWER	2	7***	0	0	0	0	0	
	DISCRIMINATION INDICES (PCT)	(22)	(78)	(0)	(0)	(0)	(0)	(0)	
	OBTAINED D= -2.8 TOTAL	4	14***	11	1	0	0	0	
	MAX= 47.2 EFF= -5.9 (PCT)	(13)	(47)	(37)	(3)	(0)	(0)	(0)	
27	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=16 PCT=53.3 .467 UPPER	0	1	7***	0	0	0	0	
	PHI COEF= .450 (SIG=.02) (PCT)	(0)	(13)	(88)	(0)	(0)	(0)	(0)	
	PT.BISER= .406 (ITEM-TOTAL) LOWER	0	5	4***	0	0	0	0	
	DISCRIMINATION INDICES (PCT)	(0)	(56)	(44)	(0)	(0)	(0)	(0)	
	OBTAINED D= 43.1 TOTAL	0	9	16***	5	0	0	0	
	MAX= 68.1 EFF= 63.3 (PCT)	(0)	(30)	(53)	(17)	(0)	(0)	(0)	
28	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=23 PCT=76.7 .233 UPPER	1	7***	0	0	0	0	0	
	PHI COEF= .245 (SIG=.20) (PCT)	(13)	(88)	(0)	(0)	(0)	(0)	(0)	
	PT.BISER= .152 (ITEM-TOTAL) LOWER	0	6***	2	1	0	0	0	
	DISCRIMINATION INDICES (PCT)	(0)	(67)	(22)	(11)	(0)	(0)	(0)	
	OBTAINED D= 20.8 TOTAL	2	23***	3	2	0	0	0	
	MAX= 45.8 EFF= 45.5 (PCT)	(7)	(77)	(10)	(7)	(0)	(0)	(0)	
29	*** OMITTED ***	A	B	C	D	E	BLNK	ERR	
	UPPER	1	1	0	1	0	5	0	
	(PCT)	(13)	(13)	(0)	(13)	(0)	(63)	(0)	
	NO ITEM VARIANCE LOWER	2	4	0	1	1	1	0	
	(PCT)	(22)	(44)	(0)	(11)	(11)	(11)	(0)	
*OMIT	TOTAL	4	12	3	2	1	8	0	
	(PCT)	(13)	(40)	(10)	(7)	(3)	(27)	(0)	
30	*** OMITTED ***	A	B	C	D	E	BLNK	ERR	
	UPPER	0	0	2	0	1	5	0	
	(PCT)	(0)	(0)	(25)	(0)	(13)	(63)	(0)	
	NO ITEM VARIANCE LOWER	1	1	5	0	1	1	0	
	(PCT)	(11)	(11)	(56)	(0)	(11)	(11)	(0)	
*OMIT	TOTAL	1	3	15	0	2	9	0	
	(PCT)	(3)	(10)	(50)	(0)	(7)	(30)	(0)	

ITEM	STATISTICS		MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()							
31	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=16	PCT=53.3	.467	UPPER	8***	0	0	0	0	0
	PHI COEF=	.789	(SIG=.001)	(PCT)	(100)	(0)	(0)	(0)	(0)	(0)
	PT.BISER=	.524	(ITEM-TOTAL)	LOWER	2***	0	5	2	0	0
	DISCRIMINATION INDICES	(PCT)	(22)	(0)	(56)	(22)	(0)	(0)	(0)	(0)
	OBTAINED D=	77.8	TOTAL	16***	2	8	3	1	0	0
	MAX=	77.8	EFF=	100.0	(PCT)	(53)	(7)	(27)	(10)	(3)
32	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=20	PCT=66.7	.333	UPPER	0	1	0	1	6***	0
	PHI COEF=	.091	(SIG=N.S.)	(PCT)	(0)	(13)	(0)	(13)	(75)	(0)
	PT.BISER=	.052	(ITEM-TOTAL)	LOWER	1	0	1	1	6***	0
	DISCRIMINATION INDICES	(PCT)	(11)	(0)	(11)	(11)	(67)	(0)	(0)	(0)
	OBTAINED D=	8.3	TOTAL	2	3	3	2	20***	0	0
	MAX=	58.3	EFF=	14.3	(PCT)	(7)	(10)	(10)	(7)	(67)
33	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=18	PCT=60.0	.400	UPPER	5***	1	0	2	0	0
	PHI COEF=	.070	(SIG=N.S.)	(PCT)	(63)	(13)	(0)	(25)	(0)	(0)
	PT.BISER=	.026	(ITEM-TOTAL)	LOWER	5***	1	1	2	0	0
	DISCRIMINATION INDICES	(PCT)	(56)	(11)	(11)	(22)	(0)	(0)	(0)	(0)
	OBTAINED D=	6.9	TOTAL	18***	2	2	7	1	0	0
	MAX=	81.9	EFF=	8.5	(PCT)	(60)	(7)	(7)	(23)	(3)
34	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=18	PCT=60.0	.400	UPPER	0	0	1	6***	1	0
	PHI COEF=	.203	(SIG=N.S.)	(PCT)	(0)	(0)	(13)	(75)	(13)	(0)
	PT.BISER=	.106	(ITEM-TOTAL)	LOWER	0	2	1	5***	1	0
	DISCRIMINATION INDICES	(PCT)	(0)	(22)	(11)	(56)	(11)	(0)	(0)	(0)
	OBTAINED D=	19.4	TOTAL	1	2	3	18***	6	0	0
	MAX=	69.4	EFF=	28.0	(PCT)	(3)	(7)	(10)	(60)	(20)
35	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=15	PCT=50.0	.500	UPPER	2	0	0	0	6***	0
	PHI COEF=	.417	(SIG=.05)	(PCT)	(25)	(0)	(0)	(0)	(75)	(0)
	PT.BISER=	.300	(ITEM-TOTAL)	LOWER	2	1	2	1	3***	0
	DISCRIMINATION INDICES	(PCT)	(22)	(11)	(22)	(11)	(33)	(0)	(0)	(0)
	OBTAINED D=	41.7	TOTAL	7	2	4	2	15***	0	0
	MAX=	91.7	EFF=	45.5	(PCT)	(23)	(7)	(13)	(7)	(50)
36	TOTAL CORRECT	REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=11	PCT=36.7	.633	UPPER	7***	1	0	0	0	0
	PHI COEF=	.653	(SIG=.001)	(PCT)	(88)	(13)	(0)	(0)	(0)	(0)
	PT.BISER=	.558	(ITEM-TOTAL)	LOWER	2***	1	6	0	0	0
	DISCRIMINATION INDICES	(PCT)	(22)	(11)	(67)	(0)	(0)	(0)	(0)	(0)
	OBTAINED D=	65.3	TOTAL	11***	9	8	2	0	0	0
	MAX=	90.3	EFF=	72.3	(PCT)	(37)	(30)	(27)	(7)	(0)

ITEM	STATISTICS	MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()							
37	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=25 PCT=83.3 .167	UPPER	0	0	8***	0	0	0	
	PHI COEF= .344 (SIG=.10)	(PCT)	(0)	(0)	(100)	(0)	(0)	(0)	
	PT.BISER= .310 (ITEM-TOTAL)	LOWER	1	0	7***	1	0	0	
	DISCRIMINATION INDICES	(PCT)	(11)	(0)	(78)	(11)	(0)	(0)	
	OBTAINED D= 22.2	TOTAL	2	1	25***	1	1	0	
	MAX= 22.2 EFF= 100.0	(PCT)	(7)	(3)	(83)	(3)	(3)	(0)	
38	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=24 PCT=80.0 .200	UPPER	0	8***	0	0	0	0	
	PHI COEF= .609 (SIG=.001)	(PCT)	(0)	(100)	(0)	(0)	(0)	(0)	
	PT.BISER= .452 (ITEM-TOTAL)	LOWER	1	4***	2	2	0	0	
	DISCRIMINATION INDICES	(PCT)	(11)	(44)	(22)	(22)	(0)	(0)	
	OBTAINED D= 55.6	TOTAL	1	24***	3	2	0	0	
	MAX= 55.6 EFF= 100.0	(PCT)	(3)	(80)	(10)	(7)	(0)	(0)	
39	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=15 PCT=50.0 .500	UPPER	0	1	1	6***	0	0	
	PHI COEF= .310 (SIG=.10)	(PCT)	(0)	(13)	(13)	(75)	(0)	(0)	
	PT.BISER= .280 (ITEM-TOTAL)	LOWER	0	2	2	4***	1	0	
	DISCRIMINATION INDICES	(PCT)	(0)	(22)	(22)	(44)	(11)	(0)	
	OBTAINED D= 30.6	TOTAL	0	7	7	15***	1	0	
	MAX= 80.6 EFF= 37.9	(PCT)	(0)	(23)	(23)	(50)	(3)	(0)	
40	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=17 PCT=56.7 .433	UPPER	0	0	7***	0	1	0	
	PHI COEF= .450 (SIG=.02)	(PCT)	(0)	(0)	(88)	(0)	(13)	(0)	
	PT.BISER= .307 (ITEM-TOTAL)	LOWER	0	3	4***	2	0	0	
	DISCRIMINATION INDICES	(PCT)	(0)	(33)	(44)	(22)	(0)	(0)	
	OBTAINED D= 43.1	TOTAL	0	5	17***	7	1	0	
	MAX= 68.1 EFF= 63.3	(PCT)	(0)	(17)	(57)	(23)	(3)	(0)	
41	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=30 PCT= 100 .000	UPPER	4***	0***	3***	0***	1***	0	
		(PCT)	(50)	(0)	(38)	(0)	(13)	(0)	
	NO ITEM VARIANCE	LOWER	0***	1***	3***	4***	1***	0	
		(PCT)	(0)	(11)	(33)	(44)	(11)	(0)	
*MULT		TOTAL	5***	2***	11***	4***	8***	0	
		(PCT)	(17)	(7)	(37)	(13)	(27)	(0)	
42	TOTAL CORRECT REL DIFF	A	B	C	D	E	BLNK	ERR	
	N=27 PCT=90.0 .100	UPPER	0	1	4***	3***	0	0	
	PHI COEF=-.265 (SIG=.20)	(PCT)	(0)	(13)	(50)	(38)	(0)	(0)	
	PT.BISER=-.116 (ITEM-TOTAL)	LOWER	0	0	6***	3***	0	0	
	DISCRIMINATION INDICES	(PCT)	(0)	(0)	(67)	(33)	(0)	(0)	
*MULT	OBTAINED D= -12.5	TOTAL	1	2	15***	12***	0	0	
	MAX= 12.5 EFF=-100.0	(PCT)	(3)	(7)	(50)	(40)	(0)	(0)	

ITEM	STATISTICS			MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()						
43	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=23	PCT=76.7	.233	UPPER	1	6***	0	1	0	0
	PHI COEF=-.033	(SIG=N.S.)	(PCT)	(13)	(75)	(0)	(13)	(0)	(0)	(0)
	PT.BISER=.024	(ITEM-TOTAL)	LOWER	0	7***	2	0	0	0	0
	DISCRIMINATION INDICES	(PCT)	(0)	(78)	(22)	(0)	(0)	(0)	(0)	(0)
	OBTAINED D=-2.8	TOTAL	3	23***	3	1	0	0	0	0
	MAX= 47.2	EFF= -5.9	(PCT)	(10)	(77)	(10)	(3)	(0)	(0)	(0)
44	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=13	PCT=43.3	.567	UPPER	5***	2	0	1	0	0
	PHI COEF=.537	(SIG=.01)	(PCT)	(63)	(25)	(0)	(13)	(0)	(0)	(0)
	PT.BISER=.328	(ITEM-TOTAL)	LOWER	1***	4	4	0	0	0	0
	DISCRIMINATION INDICES	(PCT)	(11)	(44)	(44)	(0)	(0)	(0)	(0)	(0)
	OBTAINED D= 51.4	TOTAL	13***	8	8	1	0	0	0	0
	MAX= 73.6	EFF= 69.8	(PCT)	(43)	(27)	(27)	(3)	(0)	(0)	(0)
45	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=26	PCT=86.7	.133	UPPER	2***	2***	2***	1	1	0
	PHI COEF=-.387	(SIG=.05)	(PCT)	(25)	(25)	(25)	(13)	(13)	(0)	(0)
	PT.BISER=-.171	(ITEM-TOTAL)	LOWER	4***	2***	3***	0	0	0	0
	DISCRIMINATION INDICES	(PCT)	(44)	(22)	(33)	(0)	(0)	(0)	(0)	(0)
*MULT	OBTAINED D=-25.0	TOTAL	12***	5***	9***	3	1	0	0	0
	MAX= 25.0	EFF=-100.0	(PCT)	(40)	(17)	(30)	(10)	(3)	(0)	(0)
46	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=17	PCT=56.7	.433	UPPER	1	7***	0	0	0	0
	PHI COEF=.350	(SIG=.10)	(PCT)	(13)	(88)	(0)	(0)	(0)	(0)	(0)
	PT.BISER=.327	(ITEM-TOTAL)	LOWER	0	5***	1	3	0	0	0
	DISCRIMINATION INDICES	(PCT)	(0)	(56)	(11)	(33)	(0)	(0)	(0)	(0)
	OBTAINED D= 31.9	TOTAL	1	17***	3	8	1	0	0	0
	MAX= 56.9	EFF= 56.1	(PCT)	(3)	(57)	(10)	(27)	(3)	(0)	(0)
47	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=19	PCT=63.3	.367	UPPER	0	5***	3***	0	0	0
	PHI COEF=.523	(SIG=.01)	(PCT)	(0)	(63)	(38)	(0)	(0)	(0)	(0)
	PT.BISER=.462	(ITEM-TOTAL)	LOWER	0	2***	3***	2	2	0	0
	DISCRIMINATION INDICES	(PCT)	(0)	(22)	(33)	(22)	(22)	(22)	(0)	(0)
*MULT	OBTAINED D= 44.4	TOTAL	2	12***	7***	3	6	0	0	0
	MAX= 44.4	EFF= 100.0	(PCT)	(7)	(40)	(23)	(10)	(20)	(0)	(0)
48	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=12	PCT=40.0	.600	UPPER	1	6***	1	0	0	0
	PHI COEF=.648	(SIG=.001)	(PCT)	(13)	(75)	(13)	(0)	(0)	(0)	(0)
	PT.BISER=.566	(ITEM-TOTAL)	LOWER	7	1***	1	0	0	0	0
	DISCRIMINATION INDICES	(PCT)	(78)	(11)	(11)	(0)	(0)	(0)	(0)	(0)
	OBTAINED D= 63.9	TOTAL	13	12***	4	1	0	0	0	0
	MAX= 86.1	EFF= 74.2	(PCT)	(43)	(40)	(13)	(3)	(0)	(0)	(0)

ITEM	STATISTICS			MULTIPLE CHOICE RESPONSES AND PERCENTAGES ()						
49	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=12	PCT=40.0	.600	UPPER	1	7***	0	0	0	0
	PHI COEF=	.549	(SIG=.01)	(PCT)	(13)	(88)	(0)	(0)	(0)	(0)
	PT.BISER=	.486	(ITEM-TOTAL)	LOWER	3	3***	3	0	0	0
	DISCRIMINATION INDICES		(PCT)	(33)	(33)	(33)	(0)	(0)	(0)	(0)
	OBTAINED D=	54.2	TOTAL	8	12***	8	2	0	0	0
	MAX=	79.2	EFF=	68.4	(PCT)	(27)	(40)	(27)	(7)	(0)
50	TOTAL CORRECT	REL DIFF		A	B	C	D	E	BLNK	ERR
	N=18	PCT=60.0	.400	UPPER	7***	1	0	0	0	0
	PHI COEF=	.350	(SIG=.10)	(PCT)	(88)	(13)	(0)	(0)	(0)	(0)
	PT.BISER=	.327	(ITEM-TOTAL)	LOWER	5***	0	2	2	0	0
	DISCRIMINATION INDICES		(PCT)	(56)	(0)	(22)	(22)	(0)	(0)	(0)
	OBTAINED D=	31.9	TOTAL	18***	1	2	6	0	3	0
	MAX=	56.9	EFF=	56.1	(PCT)	(60)	(3)	(7)	(20)	(0)

SUMMARY STATISTICS

TOTAL TEST STATISTICS -- TEST DISTRIBUTION

NUMBER OF STUDENTS TAKING TEST = 30
NUMBER OF ITEMS IN TEST = 50

MEAN TEST SCORE = 58.60
MEDIAN = 56
MODE = NONE

MAXIMUM = 96
MINIMUM = 40

STANDARD DEVIATION = 13.56
SKEWNESS = 0.69
KURTOSIS = -0.03

RANGE = 56

UPPER/LOWER GROUP STATISTICS

	PERCENT STUDENTS	NUMBER STUDENTS	MEAN SCORE
TOTAL	100.00	30	58.600
UPPER	26.67	8	77.500
LOWER	30.00	9	44.222

RELIABILITY ESTIMATES - BASED ON 47 ITEMS

KUDER-RICHARDSON 20 (KR 20) = 0.789
STANDARD ERROR OF MEASUREMENT = 6.220

ITEM DIFFICULTY DISTRIBUTION

BASED ON 48 ITEMS

RANGE	NUMBER OF ITEMS	PERCENTAGE OF ITEMS
.81-1.00	0	0
.61- .80	2	4
.41- .60	20	42
.21- .40	21	44
.00- .20	5	10

MEAN ITEM DIFFICULTY = .390

ITEM DISCRIMINATION DISTRIBUTION

BASED ON 47 ITEMS

RANGE	NUMBER OF ITEMS	PERCENTAGE OF ITEMS
.81-1.00	2	4
.61- .80	7	15
.41- .60	13	28
.21- .40	11	23
.00- .20	10	21
BELOW .00	4	9

MEAN ITEM DISCRIMINATION = .354

SUBJECT IDENTIFICATION	10	20	30	40	50	60	70	80	90	100
900004444 WASHINGTON	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
967654321 WATERS	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
929948234 WATTS	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
963548234 WILSON	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
922222222 YOUNG	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

SUBJECT IDENTIFICATION	NUM	SCORE	PCTL	PCTC	RAW
964321000 BUNNY BUG S	21	76	93	79	38
986311011 DUCK DONALD	23	74	83	77	37
933301234 DUKE KENNET	17	54	47	56	27
933333333 FIELDS KIM	4	40	7	42	20
975433332 IDOL BILL Y	25	54	47	56	27
999887777 JONES JIM	2	48	30	50	24
955321123 KENT CLARK	27	96	100	100	48
976655443 LANE LOIS	29	60	63	63	30
911122333 MAYFIELD JANICE	18	44	17	46	22
922333999 MCNULTY EDWIN	12	62	70	65	31
943100132 MOUSE MICKEY	22	72	80	75	36
921011112 MUNSTER HERMAN	24	46	20	48	23
987654321 NGUYEN DAVID	8	60	63	63	30
976544334 OLSON JIMMY	30	76	93	79	38
922000999 OPERATIONS TEST	10	72	80	75	36
988777665 PARKER PETER	28	54	47	56	27
911111111 PEARSON RICHA	5	64	73	67	32
912212121 PRINCE DIAN A	26	76	93	79	38
900000001 SAMPLE I AM	11	48	30	50	24
910000001 SAMPLE 2 I AM	13	40	7	42	20
967997886 SANTIAGO DINAH	9	42	13	44	21
932101234 SMITH KELLY	7	62	70	65	31
911122223 STONE SHARON	16	42	13	44	21
952101234 THOMAS FRANCE	14	56	53	58	28
998778656 VALINTINO ANTHON	31	78	97	81	39
900004444 WASHINGTON JOHN	3	48	30	50	24
967654321 WATERS DAVID	15	50	37	52	25
929948234 WATTS MEGA	20	50	37	52	25
963548234 WILSON CLAUDI	19	56	53	58	28
922222222 YOUNG SALLY	6	58	57	60	29

SUBJECT IDENTIFICATION	NUM	SCORE	PCTL	PCTC	RAW
955321123 KENT CLARK	27	96	100	100	48
998778656 VALINTINO ANTHON	31	78	97	81	39
976544334 OLSON JIMMY	30	76	93	79	38
912212121 PRINCE DIAN A	26	76	93	79	38
964321000 BUNNY BUG S	21	76	93	79	38
986311011 DUCK DONALD	23	74	83	77	37
943100132 MOUSE MICKEY	22	72	80	75	36
922000999 OPERATIONS TEST	10	72	80	75	36
911111111 PEARSON RICHA	5	64	73	67	32
922333999 MCNULTY EDWIN	12	62	70	65	31
932101234 SMITH KELLY	7	62	70	65	31
976655443 LANE LOIS	29	60	63	63	30
987654321 NGUYEN DAVID	8	60	63	63	30
922222222 YOUNG SALLY	6	58	57	60	29
963548234 WILSON CLAUDI	19	56	53	58	28
952101234 THOMAS FRANCE	14	56	53	58	28
988777665 PARKER PETER	28	54	47	56	27
975433332 IDOL BILL Y	25	54	47	56	27
933301234 DUKE KENNET	17	54	47	56	27
929948234 WATTS MEGA	20	50	37	52	25
967654321 WATERS DAVID	15	50	37	52	25
900000001 SAMPLE I AM	11	48	30	50	24
900004444 WASHINGTON JOHN	3	48	30	50	24
999887777 JONES JIM	2	48	30	50	24
921011112 MUNSTER HERMAN	24	46	20	48	23
911122333 MAYFIELD JANICE	18	44	17	46	22
911122223 STONE SHARON	16	42	13	44	21
967997886 SANTIAGO DINAH	9	42	13	44	21
910000001 SAMPLE 2 I AM	13	40	7	42	20
933333333 FIELDS KIM	4	40	7	42	20

SUBJECT IDENTIFICATION	NUM	SCORE	PCTL	PCTC	RAW
900000001	11	48	30	50	24
900004444	3	48	30	50	24
910000001	13	40	7	42	20
911111111	5	64	73	67	32
911122223	16	42	13	44	21
911122333	18	44	17	46	22
912212121	26	76	93	79	38
921011112	24	46	20	48	23
922000999	10	72	80	75	36
922222222	6	58	57	60	29
922333999	12	62	70	65	31
929948234	20	50	37	52	25
932101234	7	62	70	65	31
933301234	17	54	47	56	27
933333333	4	40	7	42	20
943100132	22	72	80	75	36
952101234	14	56	53	58	28
955321123	27	96	100	100	48
963548234	19	56	53	58	28
964321000	21	76	93	79	38
967654321	15	50	37	52	25
967997886	9	42	13	44	21
975433332	25	54	47	56	27
976544334	30	76	93	79	38
976655443	29	60	63	63	30
986311011	23	74	83	77	37
987654321	8	60	63	63	30
988777665	28	54	47	56	27
998778656	31	78	97	81	39
999887777	2	48	30	50	24

STUDENT ID: BUG S BUNNY (964321000)

SCORE: 76 RAW SCORE: 38
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++B+++ 11- 20 ++++++ 21- 30 ++BEBCB+OO
31- 40 ++B+++++C+ 41- 50 +B++E++++

STUDENT ID: DONALD DUCK (986311011)

SCORE: 74 RAW SCORE: 37
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++B++CCA 11- 20 C+++ABCDE+ 21- 30 ++++++BC
31- 40 ++++++B+ 41- 50 ++++++

STUDENT ID: KENNET DUKE (933301234)

SCORE: 54 RAW SCORE: 27
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +AAOO+BACD 11- 20 E+++++C+++ 21- 30 ++++BCD+BC
31- 40 ++++++B++CD 41- 50 ++++++DEACD

STUDENT ID: KIM FIELDS (933333333)

SCORE: 40 RAW SCORE: 20
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 CCCC+BBA++ 11- 20 +DC+CE+BBB 21- 30 DCBCC+B+BB
31- 40 +A++DCDCC+ 41- 50 +++B+++C++

STUDENT ID: BILL Y IDOL (975433332)

SCORE: 54 RAW SCORE: 27
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++B++BD 11- 20 ++++++ 21- 30 CB+++++DOO
31- 40 BBDEBBB++B 41- 50 +AAB+DDCA+

STUDENT ID: JIM JONES (999887777)

SCORE: 48 RAW SCORE: 24
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 B+CC++EECD 11- 20 +BBA+++++ 21- 30 DC+E++++BC
31- 40 DDDE+C+CBB 41- 50 +++B++DA++

STUDENT ID: CLARK KENT (955321123)

SCORE: 96 RAW SCORE: 48
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++ 11- 20 ++++++ 21- 30 ++++++OO
31- 40 ++++++ 41- 50 ++++++

STUDENT ID: LOIS LANE (976655443)

SCORE: 60 RAW SCORE: 30
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 C+C+++++ 11- 20 ++++++A+++ 21- 30 ++++++C+AOO
31- 40 CACECDACBD 41- 50 +BCC+++++

STUDENT ID: JANICE MAYFIELD (911122333)

SCORE: 44 RAW SCORE: 22
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +++C++BACD 11- 20 EDCBAB+BC+ 21- 30 D+B+B+B+AC
31- 40 C+++AC++++ 41- 50 +++C+DEACD

STUDENT ID: EDWIN MCNULTY (922333999)

SCORE: 62 RAW SCORE: 31
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++AB+ 11- 20 ++++++B+C 21- 30 CC+CCC+CCC
31- 40 C+DCAB++++ 41- 50 +++B++++A+

STUDENT ID: MICKEY MOUSE (943100132)

SCORE: 72 RAW SCORE: 36
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++B++CBB 11- 20 BAA+++++E 21- 30 ++++++AOO
31- 40 ++++++++ 41- 50 ++DB+++A+

STUDENT ID: HERMAN MUNSTER (921011112)

SCORE: 46 RAW SCORE: 23
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +A+AB+++C+ 11- 20 +CC+++AB++ 21- 30 ++ACCABCOO
31- 40 ++CBCC++EB 41- 50 +++C+DDA+C

STUDENT ID: DAVID NGUYEN (987654321)

SCORE: 60 RAW SCORE: 30
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 BCC++B+D++ 11- 20 ++++++++C 21- 30 +++A+CB+CB
31- 40 +C+EDC++B+ 41- 50 +++C+++AAO

STUDENT ID: JIMMY OLSON (976544334)

SCORE: 76 RAW SCORE: 38
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++++ 11- 20 +++++BCAC+ 21- 30 +CB++++AE
31- 40 +DDEA++++ 41- 50 ++++++++

STUDENT ID: TEST OPERATIONS (922000999)

SCORE: 72 RAW SCORE: 36
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++AB+ 11- 20 ++++++B++ 21- 30 +++CBA++DC
31- 40 ++DCAB++++ 41- 50 +++B++++A+

STUDENT ID: PETER PARKER (988777665)

SCORE: 54 RAW SCORE: 27
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 DC++B+++A++ 11- 20 ++BBCBCA+E 21- 30 D++++AB+BO
31- 40 B+++++++ 41- 50 ++A+DCA+CO

STUDENT ID: RICHA R PEARSON (911111111)

SCORE: 64 RAW SCORE: 32
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++++ 11- 20 ++OA+BC+B+ 21- 30 +++ACC++BC
31- 40 EBEEA++++ 41- 50 +++C+C++A+

STUDENT ID: DIAN A PRINCE (912212121)

SCORE: 76 RAW SCORE: 38
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 BAA++BA+++ 11- 20 CC+++++++ 21- 30 +B+C++++OO
31- 40 +B+++++++ 41- 50 ++++++++

STUDENT ID: I AM SAMPLE (900000001)

SCORE: 48 RAW SCORE: 24
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++CDE+A+CD 11- 20 EDCBABCDEC 21- 30 +++++A+++BC
31- 40 C+++++D+D 41- 50 ++CB+++AA+

STUDENT ID: I AM SAMPLE 2 (910000001)

SCORE: 40 RAW SCORE: 20
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++CDE+A+CD 11- 20 EDCBABCAAA 21- 30 AAAAA+++BC
31- 40 C+++++D+D 41- 50 ++CB+++AA+

STUDENT ID: DINAH SANTIAGO (967997886)

SCORE: 42 RAW SCORE: 21
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 B+CC+D+AB+ 11- 20 ++EBCCDCB 21- 30 ++++A++DEA
31- 40 D+DCCBAAC+ 41- 50 +++C+++AA+

STUDENT ID: KELLY SMITH (932101234)

SCORE: 62 RAW SCORE: 31
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +AAC++BACD 11- 20 E+++++C+++ 21- 30 ++++BCD+BC
31- 40 +++++B++CD 41- 50 ++++++DD+

STUDENT ID: SHARON STONE (911122223)

SCORE: 42 RAW SCORE: 21
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +++C++BACD 11- 20 EDCBAB+BC+ 21- 30 OOB+B+B+AC
31- 40 C+++AC++++ 41- 50 +++C+DEACD

STUDENT ID: FRANCE THOMAS (952101234)

SCORE: 56 RAW SCORE: 28
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +AAC++BACD 11- 20 O+++++C+++ 21- 30 ++++BCD+BC
31- 40 +++++B++CD 41- 50 +++++DEACD

STUDENT ID: ANTHON VALINTINO (998778656)

SCORE: 78 RAW SCORE: 39
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++BA++ 11- 20 ++++++O 21- 30 ++++++OO
31- 40 ++++++E 41- 50 ++ADDA+C+B

STUDENT ID: JOHN WASHINGTON (900004444)

SCORE: 48 RAW SCORE: 24
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 ++++++O 11- 20 CBBAE+CDOC 21- 30 ++++AABCDE
31- 40 CCBBC++BB 41- 50 +++++C+CC

STUDENT ID: DAVID WATERS (967654321)

SCORE: 50 RAW SCORE: 25
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 BCC++B+D++ 11- 20 ++++++O 21- 30 +++A+CB+CB
31- 40 DCDACDE+B+ 41- 50 ++++DEACDO

STUDENT ID: MEGA WATTS (929948234)

SCORE: 50 RAW SCORE: 25
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +AA+BBBACD 11- 20 E+++++C+O 21- 30 O+++BCD+BC
31- 40 +++++B++BB 41- 50 +++++DEACD

STUDENT ID: CLAUDI WILSON (963548234)

SCORE: 56 RAW SCORE: 28
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +AAC++BACD 11- 20 E+++++C+++ 21- 30 ++++BCD+BC
31- 40 +++++B++CD 41- 50 +++++DEACD

STUDENT ID: SALLY YOUNG (922222222)

SCORE: 58 RAW SCORE: 29
RESPONSES: ROW 1 HAS ITEMS 1-30, ROW 2 HAS 31-60, ETC.

1234567890 1234567890 1234567890
1- 10 +++C++BACD 11- 20 EDCBAB+BC+ 21- 30 +C+++D+++AC
31- 40 C+++AC++++ 41- 50 +++C+++++