

Norming Tables for the Student Testing Program (STP97)

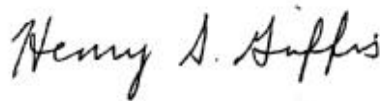
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December 2003

A handwritten signature in black ink that reads "Henry S. Griffis". The signature is written in a cursive style with a large initial 'H' and 'G'.

Henry S. Griffis, Director
Workforce, Education and Training Team
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Norming Tables for the Student Testing Program (STP97)

Dec 10, 2003

Catherine M. Hiatt and William H. Sims

This annotated briefing describes the development of the norming tables for the Student Testing Program (STP).

Background



- The STP provides a form of ASVAB to high schools and postsecondary schools for use in career exploration
- National norms are provided for students in:
 - Grades 10, 11, 12
 - Postsecondary (2-year) colleges
- Current STP norms are based on data from PAY80 and are thought to be dated
- Current norms are thought to be needed

The Department of Defense sponsors the Student Testing Program (STP), which provides a form of the Armed Services Vocational Aptitude Battery (ASVAB) for use in high schools and postsecondary schools. The test scores are used for career exploration in the schools and may also be used to enlist in the armed forces.

National norms are provided for students in grades 10, 11, and 12 as well as for postsecondary (2-year) colleges. These norms enable students to know how their scores compare with a national sample of youth in their particular grade.

These updated norming tables are based on a more current administration of the ASVAB. This data collection was done by the National Opinion Research Center (NORC) and is part of the National Longitudinal Survey of Youth (NLSY97). It was completed in 1997 as part of a joint DOL/DOD effort known as the Profile of American Youth 1997 (PAY97).

STP ASVAB Summary Report



ASVAB Results		12th Grade Standard Scores	12th Grade Standard Score Bands										Percentile Scores			
			1	10	20	30	40	50	60	70	80	90	99	12th Grade Male	12th Grade Female	12th Grade Student
Career Exploration Scores																
Verbal Skills	59								X					83	84	83
Math Skills	62								X					84	87	85
Science and Technical Skills	62								X					77	97	87
ASVAB Tests																
General Science (GS)	64								X					92	95	94
Arithmetic Reasoning (AR)	64								X					89	93	91
Word Knowledge (WK)	58								X					79	82	80
Paragraph Comprehension (PC)	59								X					89	89	89
Mathematics Knowledge (MK)	59								X					78	82	80
Electronics Information (EI)	59								X					69	95	82
Auto and Shop Information (ASI)	59								X					67	98	82
Mechanical Comprehension (MC)	59								X					68	95	81
Military Careers Score	5															
Military Entrance Score (AFQT)	80															

This slide shows a notional ASVAB Summary Report that is made available to students taking the High School version of ASVAB. It gives results for three composites and eight subtests as listed on the left side of the slide.

The scores are reported in two metrics: grade-specific standard scores (shown on the left) and grade-specific percentile scores (shown on the right). The grade-specific percentile scores are tabulated separately based on norms by gender as well as for combined genders.

The score bands are based on grade-specific norms. The “X” denotes the grade-specific standard score, and the grey area denotes one standard error of uncertainty about the value.

In this briefing, we will describe the STP norms that provide the basis for the numbers in these reports.

Norming samples



- Norms are developed for two sub-samples of the PAY97:
 - Grades 10, 11, and 12 in fall 1997 (STP sample)
 - Postsecondary (2-year college) students (part of the ETP sample)

We have developed norming tables for students in the 10th, 11th, and 12th grades as well as for postsecondary students.

Selection for grades 10, 11, and 12



- STP sample with poststratification weights by gender and grade developed by NORC
 - Sample found to be representative of the population¹
 - Score improvement consistent with NAEP results¹
- Selections
 - Eligs = 's'
 - Wt6s > 0
 - Fgrade97 = 10, 11, or 12
 - All subtests scores > 0
 - 4,629 cases (weighted cases: 11,388,783)

1. Sims and Hiatt, 2002

We selected a STP sample that had been poststratification weighted by NORC on gender and grade. A total of 4,629 cases were found with the proper eligibility code, positive case weights, all subtest scores greater than zero, and expected grade in fall 1997 of 10, 11, or 12.

In another document, we examined the distribution of aptitude-correlated demographics (age, gender, race, education, and mother's education) for this sample.¹ The distributions agree well with those expected from the Current Population Survey (CPS). We concluded that the STP sample as weighted by NORC is representative of the national population in grades 10, 11, and 12.

As a further check, we calculated the change in math and verbal scores for 17-year-olds between PAY80 and PAY 97 and compared this with the change in similar scores from the National Assessment of Educational Progress (NAEP) from the same time period. The changes in PAY and in the external benchmark were almost identical. This further increases our confidence in the PAY97 scores.

1. CNA Annotated Briefing, D0007499.A1, *An Evaluation of the Student Testing Program (STP97) Norming Sample*, Sponsor Review Version, Dec 2002.

Selection for 2-year college (aka postsecondary schools)

- ETP sample with poststratification weights by age, gender, race/ethnicity, and respondent's education developed by Stanford University²
- Selections:
 - Eligeout = 'e'
 - fspoarge >0
 - 1,185 cases (weighted cases: 4,375,597)
 - Online questionnaire, question #3
 - What type of school are you now attending, or did you last attend? Option 7 (2-yr college)
- Parallel selections were made in the development of STP80

2. MaCurdy and Vytlačil

This slide describes the data selections we made to get the 2-year college sample. These selections are parallel to those used in developing STP80 norms. The selections yield 1,185 persons 18 to 23 years of age who are, or have been, enrolled in 2-year colleges as of October 1997.

In this document, we will be using the PAY97/ETP data for STP persons in 2-year colleges. Consequently, we used the PAY97 case weights (fspoarge) developed by Stanford University.²

2. T. MaCurdy and E. Vytlačil, "AFQT Norms and the PAY97," Stanford University, Department of Economics, 2002

Sample size



Cases					
	10 th	11 th	12 th	PS	YP
Males	895	726	676	506	2,537
Females	826	788	718	685	3,126
Total	1,721	1,514	1,394	1,185	5,663
Population weighted cases					
Males	2,060,749	1,855,373	1,868,837	2,062,708	10,582,605
Females	1,951,997	1,810,663	1,841,165	2,312,889	10,534,475
Total	4,012,746	3,660,036	3,710,001	4,375,597	21,117,079

This chart shows the sample size for each of the subgroups that we will be using in this analysis.

STP norming tables



- Means and standard deviations from the ETP sample¹ in PAY97 are used to define standard scores
- Composite scores are the sums of subtest standard scores and are standardized to (50,10) in ETP:
 - Math Skills = AR+MK
 - Verbal Skills = VE
 - Science and Technical Skills = GS+EI+MC
- Grade- and gender-specific percentile score equivalents to standard scores are developed in the STP sample and are shown in the appendix
- Grade-specific means and standard deviations are developed in the STP97 sample for use in calculating grade-specific standard scores

1. 5,663 youth age 18 to 23. The population weighted sample is 21,117,079

The means and standard deviations from the ETP sample in the Profile of American Youth 1997 (PAY97) are used to define subtest standard scores.³

The sums of standard scores are then used to define the STP composites (mean of 50, standard deviation of 10) in the ETP sample:

Math Skills = AR+MK

Verbal Skills = VE

Science and Technical Skills = GS+EI+MC

Percentile score equivalents for the subtests and composites are determined separately for grades 10, 11, and 12 as well as the postsecondary sample. These are shown in the appendix.

Grade-specific means and standard deviations are calculated in the STP97 sample for use in calculating grade-specific standard scores.

3. The ETP subsample consists of 5,663 youth age 18 to 23. The weighted sample size is 21,117,079.

Subtest means and standard deviations by grade

ASVAB subtest	Grade							
	10th		11 th		12 th		Postsecondary	
	Mean	STD	Mean	STD	Mean	STD	Mean	STD
General Science (GS)	46.256	9.451	48.531	9.542	49.479	9.724	50.198	8.747
Arithmetic Reasoning (AR)	45.204	10.289	47.793	10.634	48.939	10.575	50.825	8.269
Word Knowledge (WK)	43.469	9.409	45.836	9.511	47.519	9.075	50.375	8.846
Paragraph Comprehension (PC)	44.010	11.144	46.503	10.798	48.050	10.380	50.784	8.778
Math Knowledge (MK)	47.297	9.290	50.149	9.676	51.377	9.833	51.661	7.932
Mechanical Comprehension (MC)	45.589	10.052	47.354	9.879	48.491	9.874	49.825	9.004
Auto & Shop Information (AS)	43.153	8.252	44.903	8.573	46.239	9.144	49.804	9.640
Electronic Information (EI)	43.763	9.387	45.447	9.144	47.425	9.594	50.489	9.413
Assembling Objects (AO)	46.965	9.791	48.563	10.263	49.399	9.978	50.177	9.729
Verbal (VE)	43.301	9.966	45.863	9.932	47.580	9.465	50.584	8.595

This chart shows the ASVAB subtest score means and standard deviations for grades 10, 11, 12, and postsecondary youth. These data can be used to generate grade-specific subtest standard scores.

STP composites in youth population¹

STP composite	Sum of subtest standard scores (SSS)		Composite standard scores ² (CSS)	
	Mean	Standard deviation (std)	Mean	Standard deviation (std)
Math Skills	100.004	18.950	49.995	10.011
Verbal Skills	50.003	9.995	50.003	9.995
Science and Technical Skills	149.998	26.817	50.001	9.993

1. 5,663 cases, population weighted 21,117,079
2. $CSS = RND[50 + (10/std)(SSS - \text{mean SSS})]$

The three STP composites were defined in the ETP population as sums of subtest standard scores. The means and standard deviations of these sums are shown in this table. These sums were standardized to a mean of 50 and a standard deviation of 10 in the ETP population.

Composite means and standard deviations by grade

	Grade							
	10th		11th		12th		Postsecondary	
ASVAB Composite	Mean	STD	Mean	STD	Mean	STD	Mean	STD
Math Skills	46.027	9.776	48.902	10.194	50.162	10.241	51.324	7.905
Verbal Skills	43.301	9.966	45.863	9.932	47.580	9.465	50.584	8.595
Science and Technical Skills	44.632	9.615	46.752	9.493	48.280	9.760	50.183	8.915

This chart shows the ASVAB composite score means and standard deviations for grades 10, 11, 12, and postsecondary youth. These data can be used to generate grade-specific composite standard scores.

Excerpts from percentile tables: (corresponding to SS=50)

	10 th grade			11 th grade			12 th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
GS	63	73	68	52	61	57	46	64	55	42	60	51	52
AR	67	75	71	60	64	62	46	67	57	39	54	47	51
WK	75	78	77	66	69	67	55	66	60	46	51	49	50
PC	70	65	68	60	57	59	53	53	53	41	39	40	45
MK	64	56	60	51	45	48	40	48	44	41	43	42	50
MC	60	75	67	51	71	61	41	71	56	35	68	52	50
AS	71	96	83	59	93	76	53	91	72	34	78	57	56
EI	69	90	79	64	88	76	49	85	67	32	75	55	54
AO	63	56	60	54	50	52	47	51	49	44	48	46	46
VE	75	74	75	65	65	65	56	61	58	45	49	47	48
MS	66	66	66	54	53	54	43	52	48	39	46	43	50
VS	75	74	75	65	65	65	56	61	58	45	49	47	48
STS	64	83	73	56	78	67	43	76	60	34	69	53	51

This slide shows excerpts from the percentile tables. The slide is intended to give the reader a quick feel for the percentile tables.

For each subtest, we show the percentile corresponding to a subtest (or composite) standard score of 50 for each of the grade groups and for male (M), female (F), and combined genders (C). For example, a subtest standard score of 50 on the GS subtest corresponds to the 63 percentile of performance for male 10th grade students. The same standard score of 50 on GS also corresponds to the 52nd percentile of the youth population (YP).

Appendix: STP Norming Tables

Table A-1. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Assembling Objects (AO)

<u>SSS</u>	<u>10th grade</u>			<u>11th grade</u>			<u>12th grade</u>			<u>Postsecondary</u>			<u>YP</u>
	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	
26	1	1	1	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	2	1	1	1	1	1	1	1	1
28	2	2	2	2	3	2	1	1	1	1	1	1	1
29	3	4	4	3	3	3	2	2	2	1	2	2	2
30	5	6	5	5	5	5	4	3	3	2	3	3	3
31	7	7	7	7	7	7	6	4	5	4	5	4	5
32	8	9	9	9	8	9	8	6	7	5	6	6	6
33	11	10	11	11	10	10	10	8	9	7	8	7	8
34	14	12	13	13	11	12	11	9	10	9	9	9	9
35	17	13	15	16	12	14	12	11	11	10	12	11	11
36	20	15	18	17	14	15	13	12	13	11	13	12	12
37	22	17	19	20	16	18	14	13	14	12	14	13	13
38	25	19	22	22	18	20	16	15	16	13	16	14	15
39	28	21	24	23	20	22	18	18	18	13	17	16	17
40	29	24	27	26	22	24	20	22	21	15	20	18	19
41	34	26	30	28	25	26	23	24	23	18	22	20	21
42	38	29	34	31	27	29	25	27	26	20	25	23	24
43	42	33	38	34	29	32	28	31	29	22	27	25	27
44	47	37	42	37	32	35	31	35	33	24	33	29	30
45	50	40	45	40	35	38	34	37	35	27	34	31	33
46	53	43	48	42	38	40	36	40	38	30	36	33	35
47	55	47	51	45	41	43	39	43	41	31	38	35	38
48	57	51	54	48	45	46	42	46	44	36	41	39	40
49	60	54	57	52	48	50	45	49	47	39	45	42	43
50	63	56	60	54	50	52	47	51	49	44	48	46	46
51	66	61	63	57	55	56	50	55	53	48	51	50	50
52	68	64	67	60	59	59	52	59	56	51	54	52	53
53	71	69	70	62	61	62	55	64	59	56	59	57	58
54	74	72	73	66	66	66	59	68	64	59	64	61	62
55	77	77	77	68	71	70	65	74	69	64	68	66	67
56	81	82	81	73	76	74	68	77	73	69	75	72	72
57	84	85	85	77	80	79	72	82	77	74	80	77	76
58	87	89	88	81	85	83	76	86	81	78	85	82	80
59	89	91	90	84	87	85	80	87	84	80	89	85	83
60	91	94	92	87	89	88	83	90	87	82	91	87	86
61	94	95	94	89	91	90	86	92	89	86	93	90	88
62	95	96	95	93	93	93	89	95	92	89	95	92	91
63	97	97	97	96	95	95	91	96	94	91	96	93	93
64	98	98	98	97	96	97	94	97	95	92	97	95	94
65	98	99	99	98	97	97	95	98	97	93	97	95	96
66	99	99	99	98	98	98	98	99	98	95	98	96	97
67	99	99	99	99	99	99	98	99	99	97	99	98	98
68	99	99	99	99	99	99	99	99	99	98	99	98	98
69	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-2. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Arithmetic Reasoning (AR)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
17	1	1	1	1	1	1	1	1	1	1	1	1	1
18	2	1	2	1	2	1	1	1	1	1	1	1	1
19	2	1	2	1	2	2	2	1	1	1	1	1	1
20	3	2	2	2	2	2	2	1	2	1	1	1	1
21	3	2	3	2	3	2	3	1	2	1	1	1	1
22	4	2	3	3	3	3	3	2	2	1	1	1	1
23	5	3	4	3	3	3	4	2	3	1	1	1	2
24	6	3	4	3	4	4	4	2	3	1	1	1	2
25	6	3	5	4	4	4	4	2	3	1	1	1	2
26	7	4	6	4	5	4	5	2	4	1	1	1	2
27	8	5	7	5	5	5	6	3	4	1	1	1	3
28	8	6	7	5	6	5	6	4	5	1	1	1	3
29	9	7	8	5	6	6	7	4	5	1	1	1	3
30	10	8	9	6	7	7	7	5	6	2	1	1	4
31	11	9	10	6	8	7	7	5	6	2	1	1	4
32	13	10	11	7	9	8	8	6	7	2	1	2	5
33	14	11	12	8	10	9	9	7	8	3	2	2	5
34	15	12	13	9	11	10	9	8	9	3	2	3	6
35	16	14	15	11	13	12	10	9	10	4	4	4	7
36	18	17	17	12	13	13	11	10	10	5	4	4	8
37	21	19	20	13	15	14	12	12	12	5	5	5	9
38	22	22	22	14	18	16	13	13	13	6	6	6	11
39	25	26	25	16	19	18	14	16	15	6	9	8	13
40	28	29	29	18	21	20	15	19	17	8	11	10	15
41	31	31	31	21	25	23	17	22	19	9	13	11	17
42	33	36	35	24	28	26	20	25	23	11	16	14	20
43	37	41	39	26	32	29	22	30	26	13	21	17	23
44	41	46	43	30	36	33	24	34	29	16	24	20	26
45	45	49	47	34	41	38	27	39	33	20	28	24	29
46	50	54	52	39	44	42	30	43	37	23	32	28	33
47	55	60	57	43	50	46	33	49	41	26	37	32	37
48	58	66	62	48	54	51	36	55	46	30	43	37	42
49	63	71	67	54	58	56	41	62	51	34	48	42	47
50	67	75	71	60	64	62	46	67	57	39	54	47	51
51	70	79	74	65	68	67	52	70	61	44	61	53	56
52	74	82	78	68	73	71	57	74	65	50	65	58	60
53	76	84	80	70	76	73	62	76	69	56	69	63	64
54	79	86	83	73	78	75	64	79	71	61	74	68	68
55	82	88	85	75	80	77	69	80	74	67	79	73	72
56	85	90	87	77	81	79	71	82	77	72	82	77	76
57	88	91	89	79	83	81	75	84	79	75	86	81	78
58	89	93	91	82	85	84	76	87	81	78	88	83	81
59	90	94	92	84	87	85	79	88	83	81	90	86	83
60	92	95	93	86	89	88	81	90	85	84	92	88	85
61	94	96	95	88	92	90	84	92	88	87	93	90	88
62	96	98	97	90	93	92	86	93	89	89	94	91	90
63	96	98	97	92	95	94	87	95	91	91	96	93	91
64	97	99	98	94	97	95	91	96	93	93	97	95	93
65	98	99	99	95	98	97	93	98	96	95	98	96	95
66	99	99	99	96	99	98	95	99	97	97	98	98	96
67	99	99	99	97	99	98	96	99	98	98	99	99	97
68	99	99	99	97	99	99	97	99	98	99	99	99	98
69	99	99	99	99	99	99	98	99	99	99	99	99	98
70	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-3. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Auto Shop (AS)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
25	1	1	1	1	1	1	1	1	1	1	1	1	1
26	2	2	2	1	1	1	1	1	1	1	1	1	1
27	2	3	2	1	1	1	1	1	1	1	1	1	1
28	2	4	3	1	2	1	1	1	1	1	1	1	1
29	3	5	4	2	2	2	2	2	2	1	1	1	1
30	4	6	5	2	4	3	2	3	2	1	2	1	1
31	6	7	6	3	6	4	2	3	3	1	2	1	2
32	6	10	8	4	7	6	2	5	4	1	3	2	2
33	8	12	10	5	10	8	3	8	5	1	4	2	3
34	10	17	13	6	13	10	4	11	7	1	5	3	4
35	12	21	16	7	18	13	6	13	9	1	8	4	6
36	14	26	20	9	22	15	7	17	12	1	11	6	7
37	17	31	24	11	26	19	9	23	16	2	14	8	9
38	20	37	28	13	31	22	11	28	20	3	18	11	12
39	24	44	34	15	38	26	15	33	24	4	21	13	14
40	26	52	39	20	45	32	17	40	28	5	26	16	18
41	30	59	44	23	52	37	19	46	32	7	32	20	20
42	33	66	49	26	59	42	21	53	37	9	37	24	24
43	38	73	55	30	65	47	24	60	42	11	41	27	27
44	44	78	61	35	71	53	27	66	46	13	47	31	31
45	48	82	64	38	77	58	31	72	51	16	51	35	35
46	54	85	69	43	81	61	35	77	56	20	57	39	39
47	59	88	73	48	85	66	38	83	60	23	61	43	43
48	63	92	77	51	89	70	42	85	63	28	68	49	47
49	68	94	80	55	91	73	47	88	67	31	72	53	51
50	71	96	83	59	93	76	53	91	72	34	78	57	56
51	74	97	85	63	95	79	56	93	74	37	81	60	59
52	76	98	87	68	96	82	60	97	78	41	86	65	63
53	81	99	90	71	98	84	64	98	81	46	89	69	66
54	84	99	91	74	98	86	68	98	83	49	92	72	69
55	85	99	92	78	99	88	72	99	85	54	94	75	72
56	88	99	93	81	99	90	76	99	87	57	96	78	75
57	90	99	95	84	99	92	78	99	89	62	97	80	78
58	91	99	95	86	99	93	81	99	91	66	98	83	80
59	93	99	96	89	99	94	83	99	91	69	99	84	82
60	94	99	97	90	99	95	86	99	93	71	99	86	84
61	96	99	98	92	99	96	88	99	94	74	99	87	86
62	97	99	98	93	99	96	89	99	95	76	99	89	88
63	97	99	99	94	99	97	91	99	95	81	99	91	90
64	98	99	99	96	99	98	92	99	96	84	99	92	91
65	98	99	99	96	99	98	93	99	96	86	99	93	93
66	98	99	99	98	99	99	94	99	97	89	99	95	94
67	99	99	99	98	99	99	95	99	98	91	99	96	95
68	99	99	99	99	99	99	96	99	98	92	99	96	96
69	99	99	99	99	99	99	96	99	98	93	99	97	96
70	99	99	99	99	99	99	97	99	98	94	99	97	97
71	99	99	99	99	99	99	97	99	99	94	99	97	98
72	99	99	99	99	99	99	98	99	99	95	99	97	98
73	99	99	99	99	99	99	99	99	99	96	99	98	98
74	99	99	99	99	99	99	99	99	99	98	99	99	99
75	99	99	99	99	99	99	99	99	99	98	99	99	99
76	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-4. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Electronic Information (EI)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
22	1	1	1	1	1	1	1	1	1	1	1	1	1
23	2	1	1	1	1	1	1	1	1	1	1	1	1
24	2	1	2	1	2	1	1	1	1	1	1	1	1
25	4	2	3	1	2	2	1	1	1	1	1	1	1
26	6	3	4	2	3	2	2	1	1	1	1	1	1
27	6	4	5	2	3	3	2	2	2	1	1	1	1
28	7	5	6	3	4	3	3	2	2	1	1	1	2
29	8	7	8	4	5	4	3	3	3	1	1	1	2
30	10	8	9	5	6	5	4	3	3	1	2	1	2
31	11	9	10	5	8	7	5	5	5	1	3	2	3
32	13	10	12	7	9	8	7	6	6	1	4	3	4
33	14	13	13	7	10	9	8	7	7	2	5	3	5
34	15	15	15	9	13	11	9	8	8	2	6	4	6
35	18	18	18	10	16	13	9	10	10	2	7	5	7
36	20	21	21	12	18	15	10	13	11	3	9	6	8
37	22	26	24	13	21	17	11	15	13	3	10	7	9
38	25	30	27	17	24	20	12	20	16	4	12	8	11
39	28	34	31	19	29	24	13	25	19	5	15	10	13
40	31	39	35	21	34	28	15	29	22	6	18	12	16
41	34	45	39	23	40	32	16	34	25	7	23	15	19
42	36	51	43	27	47	37	18	40	29	8	26	18	21
43	40	56	48	31	52	41	20	47	34	10	31	21	24
44	45	61	53	34	57	45	23	52	37	13	36	25	28
45	49	68	59	38	62	50	26	57	41	15	41	29	32
46	53	73	63	41	68	54	30	63	46	17	48	34	35
47	57	79	68	47	72	60	34	67	50	20	53	38	39
48	60	83	71	53	79	66	38	74	56	26	58	43	44
49	65	87	76	59	83	70	43	79	61	28	69	50	49
50	69	90	79	64	88	76	49	85	67	32	75	55	54
51	74	92	83	67	91	79	54	90	72	36	80	59	59
52	77	93	85	70	93	81	58	92	75	40	85	63	64
53	80	94	87	74	95	84	62	94	78	44	87	67	68
54	82	95	89	77	96	86	66	95	80	48	89	70	71
55	84	96	90	79	97	88	69	96	82	53	91	73	74
56	86	97	91	82	97	89	73	96	85	58	93	76	77
57	88	98	93	85	97	91	75	97	86	62	95	79	79
58	89	98	93	87	98	92	78	98	88	65	96	81	82
59	90	98	94	89	98	93	81	98	90	70	97	84	84
60	92	99	95	91	98	95	84	98	91	73	98	86	86
61	93	99	96	93	99	96	85	99	92	77	99	88	88
62	94	99	96	93	99	96	87	99	93	79	99	89	89
63	95	99	97	95	99	97	90	99	95	82	99	91	91
64	96	99	98	96	99	98	91	99	95	86	99	93	92
65	98	99	99	96	99	98	92	99	96	87	99	93	93
66	98	99	99	96	99	98	93	99	96	89	99	94	94
67	98	99	99	97	99	98	94	99	97	91	99	95	95
68	99	99	99	97	99	98	94	99	97	92	99	96	95
69	99	99	99	97	99	99	95	99	98	92	99	96	96
70	99	99	99	98	99	99	96	99	98	93	99	97	97
71	99	99	99	98	99	99	97	99	98	94	99	97	97
72	99	99	99	99	99	99	98	99	99	96	99	98	98
73	99	99	99	99	99	99	98	99	99	97	99	98	98
74	99	99	99	99	99	99	99	99	99	97	99	99	99
75	99	99	99	99	99	99	99	99	99	98	99	99	99
76	99	99	99	99	99	99	99	99	99	98	99	99	99
77	99	99	99	99	99	99	99	99	99	98	99	99	99
78	99	99	99	99	99	99	99	99	99	98	99	99	99
79	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-5. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest General Science (GS)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
24	1	1	1	1	1	1	1	1	1	1	1	1	1
25	2	1	1	1	1	1	1	1	1	1	1	1	1
26	2	1	2	1	2	1	1	1	1	1	1	1	1
27	3	2	2	2	2	2	1	1	1	1	1	1	1
28	4	2	3	2	3	2	1	1	1	1	1	1	2
29	4	3	3	2	4	3	2	2	2	1	2	1	2
30	5	4	5	3	5	4	3	3	3	1	2	1	2
31	6	6	6	5	6	5	4	4	4	1	2	2	3
32	8	8	8	5	6	6	4	4	4	2	2	2	4
33	10	10	10	7	7	7	6	6	6	2	3	2	5
34	12	12	12	7	9	8	6	7	7	3	4	3	7
35	14	14	14	9	10	10	7	9	8	3	6	5	8
36	15	16	16	10	12	11	9	11	10	4	6	5	9
37	18	19	19	12	14	13	9	14	12	6	10	8	12
38	20	24	22	14	17	16	10	17	14	7	12	9	13
39	23	28	25	16	19	17	12	19	16	8	14	11	15
40	26	31	28	17	21	19	14	22	18	10	16	13	18
41	28	35	32	20	24	22	16	25	20	12	20	16	20
42	32	38	35	22	27	24	18	29	23	13	24	19	23
43	35	42	38	25	31	28	21	31	26	17	29	23	26
44	38	43	41	29	35	32	23	34	29	20	32	26	29
45	42	48	45	32	39	35	27	39	33	23	36	30	32
46	44	52	48	34	43	38	30	42	36	28	41	35	36
47	49	54	51	40	47	43	35	49	42	31	45	39	39
48	53	60	56	45	52	48	39	53	46	34	50	43	44
49	58	66	62	48	57	52	42	59	51	38	54	46	48
50	63	73	68	52	61	57	46	64	55	42	60	51	52
51	67	76	71	57	67	62	50	69	59	44	65	55	55
52	72	80	76	61	70	66	54	73	64	48	69	59	59
53	75	84	80	67	75	71	57	78	67	53	73	64	63
54	78	87	82	69	79	74	60	80	70	59	76	68	67
55	80	88	84	72	81	76	65	83	74	61	79	71	70
56	83	90	86	75	83	79	68	85	76	67	83	76	74
57	85	92	88	79	85	82	72	86	79	72	86	79	77
58	87	94	90	82	88	85	75	89	82	75	89	82	80
59	89	95	92	86	90	88	79	89	84	80	91	86	83
60	90	97	93	88	92	90	81	91	86	83	92	88	85
61	92	97	95	89	94	92	84	94	89	87	93	90	87
62	94	98	96	91	96	93	86	95	90	90	94	92	89
63	95	98	96	92	97	94	88	96	92	92	95	94	91
64	95	99	97	95	97	96	91	98	94	95	96	96	93
65	96	99	97	96	98	97	92	98	95	96	98	97	94
66	97	99	98	97	99	98	93	99	96	96	98	97	95
67	98	99	99	97	99	98	95	99	97	97	98	98	96
68	99	99	99	99	99	99	96	99	98	98	99	99	97
69	99	99	99	99	99	99	97	99	98	98	99	99	98
70	99	99	99	99	99	99	97	99	98	98	99	99	98
71	99	99	99	99	99	99	98	99	99	98	99	99	99
72	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-6. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Mechanical Comprehension (MC)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
21	1	1	1	1	1	1	1	1	1	1	1	1	1
22	3	1	2	1	1	1	1	2	1	1	1	1	1
23	3	2	3	1	2	2	1	3	2	1	1	1	1
24	4	2	3	2	2	2	1	3	2	1	1	1	1
25	4	4	4	2	3	2	1	3	2	1	2	1	2
26	5	4	5	2	3	3	2	4	3	1	2	1	2
27	6	5	6	3	4	4	2	4	3	1	2	2	2
28	7	7	7	4	5	4	3	4	4	1	3	2	3
29	8	8	8	4	6	5	4	5	4	1	3	2	3
30	9	9	9	5	8	7	4	6	5	2	4	3	4
31	10	12	11	6	9	7	5	7	6	2	5	4	5
32	11	13	12	7	10	9	7	8	8	2	6	4	6
33	13	15	14	8	12	10	8	9	8	2	7	5	6
34	14	17	15	9	13	11	8	11	10	3	8	5	7
35	15	19	17	10	15	13	9	13	11	3	9	6	8
36	17	21	19	11	16	14	9	14	12	4	10	7	9
37	19	23	21	13	19	16	11	16	13	5	12	8	11
38	20	26	23	14	21	18	12	18	15	5	13	9	13
39	22	29	26	15	26	20	14	20	17	6	15	11	14
40	24	31	27	16	29	22	15	22	19	7	17	12	16
41	26	34	30	17	32	24	17	25	21	8	20	14	18
42	29	38	33	18	35	27	18	28	23	9	24	17	20
43	31	41	36	21	40	30	19	33	26	12	29	21	23
44	34	45	39	24	44	34	22	37	29	15	33	25	25
45	37	51	44	27	48	37	24	41	33	19	39	29	29
46	40	56	48	29	51	40	27	46	36	21	43	32	32
47	44	59	52	34	57	45	29	52	40	23	49	36	36
48	49	65	57	39	62	51	32	57	44	26	54	41	40
49	54	70	62	44	67	55	36	64	50	29	63	47	45
50	60	75	67	51	71	61	41	71	56	35	68	52	50
51	64	80	72	55	78	66	46	78	62	41	73	58	55
52	67	85	76	59	82	71	52	83	67	47	77	63	60
53	72	88	79	64	86	75	59	86	72	51	82	67	65
54	76	91	83	69	89	79	64	89	76	56	85	72	69
55	80	93	86	73	92	82	68	92	80	61	89	76	73
56	83	95	89	79	94	86	72	94	83	65	93	80	77
57	85	97	91	82	95	88	76	95	85	68	95	82	79
58	88	98	93	85	96	91	78	97	87	74	96	86	82
59	90	98	94	88	97	92	80	97	89	78	97	88	85
60	92	99	95	89	98	93	82	98	90	82	97	90	87
61	94	99	96	90	98	94	85	99	92	86	98	92	89
62	95	99	97	91	99	95	87	99	93	87	98	93	90
63	96	99	98	93	99	96	88	99	94	89	99	94	92
64	96	99	98	94	99	97	90	99	95	90	99	95	93
65	97	99	98	95	99	98	91	99	96	91	99	95	94
66	98	99	99	96	99	98	94	99	97	93	99	96	95
67	98	99	99	97	99	98	95	99	97	94	99	97	96
68	98	99	99	97	99	98	96	99	98	96	99	98	97
69	99	99	99	97	99	99	97	99	98	97	99	98	98
70	99	99	99	97	99	99	98	99	99	98	99	99	98
71	99	99	99	98	99	99	99	99	99	98	99	99	98
72	99	99	99	99	99	99	99	99	99	98	99	99	99
73	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-7. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Math Knowledge (MK)

<u>SSS</u>	<u>10th grade</u>			<u>11th grade</u>			<u>12th grade</u>			<u>Postsecondary</u>			<u>YP</u>
	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	
23	1	1	1	1	1	1	1	1	1	1	1	1	1
24	2	1	1	2	1	1	1	1	1	1	1	1	1
25	2	1	2	2	1	1	1	1	1	1	1	1	1
26	3	1	2	3	1	2	2	1	1	1	1	1	1
27	3	2	2	3	2	3	2	1	2	1	1	1	1
28	4	2	3	4	2	3	3	2	2	1	1	1	2
29	5	2	4	4	3	3	3	3	3	1	1	1	2
30	5	3	4	4	3	4	4	3	3	1	1	1	3
31	7	4	5	4	3	4	4	4	4	1	1	1	4
32	8	5	7	5	4	4	4	4	4	2	2	2	4
33	9	6	8	6	4	5	4	5	5	2	2	2	5
34	11	7	9	8	6	7	4	6	5	2	2	2	7
35	13	10	12	9	7	8	5	8	7	3	2	2	8
36	15	11	13	11	8	9	6	9	8	4	3	3	10
37	18	12	15	12	9	11	7	11	9	4	4	4	11
38	21	14	18	13	11	12	9	12	11	5	5	5	13
39	24	17	21	15	12	14	12	14	13	7	6	7	15
40	28	20	24	17	15	16	13	16	14	9	8	9	18
41	31	24	28	19	16	18	14	19	16	11	11	11	21
42	33	28	30	21	19	20	15	21	18	14	13	13	24
43	36	31	33	24	23	23	17	24	20	16	16	16	27
44	39	34	37	26	26	26	20	27	24	18	20	19	30
45	43	37	40	29	29	29	24	29	26	21	24	23	35
46	46	40	43	33	32	33	26	32	29	26	27	27	38
47	51	44	48	38	35	37	28	35	32	31	31	31	41
48	56	49	52	42	38	40	32	39	35	34	34	34	44
49	61	52	57	47	42	45	36	43	39	37	37	37	47
50	64	56	60	51	45	48	40	48	44	41	43	42	50
51	68	60	64	55	49	52	45	51	48	46	48	47	54
52	73	64	69	59	52	56	49	54	51	52	51	52	57
53	75	69	72	64	59	61	53	57	55	55	56	55	60
54	80	75	77	68	62	65	59	61	60	60	59	59	63
55	82	78	80	71	66	68	63	65	64	65	65	65	67
56	85	83	84	74	71	72	66	69	68	70	70	70	69
57	86	86	86	77	74	75	69	72	71	73	76	74	73
58	89	89	89	80	77	79	71	75	73	77	80	78	77
59	91	91	91	83	82	83	74	80	77	82	84	83	81
60	93	94	94	87	85	86	79	83	81	85	89	87	84
61	96	96	96	89	87	88	83	86	84	90	92	91	88
62	97	97	97	91	91	91	85	90	88	91	94	93	91
63	98	98	98	94	94	94	89	92	90	94	96	95	93
64	98	98	98	96	96	96	91	93	92	95	97	96	94
65	98	99	99	97	97	97	93	96	95	97	99	98	96
66	99	99	99	98	98	98	95	97	96	98	99	99	97
67	99	99	99	98	99	98	96	99	98	98	99	99	98
68	99	99	99	99	99	99	98	99	99	99	99	99	98
69	99	99	99	99	99	99	98	99	99	99	99	99	99
70	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-8. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Paragraph Comprehension (PC)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
18	1	1	1	1	1	1	1	1	1	1	1	1	1
19	2	1	1	1	1	1	1	1	1	1	1	1	1
20	3	1	2	1	1	1	1	1	1	1	1	1	1
21	4	2	3	2	1	1	2	1	2	1	1	1	1
22	5	3	4	2	1	2	3	2	2	1	1	1	1
23	7	3	5	4	3	3	4	2	3	1	1	1	2
24	8	4	6	5	5	5	5	2	4	1	1	1	2
25	9	5	7	6	5	5	6	2	4	1	1	1	2
26	10	5	8	7	5	6	6	3	4	2	1	2	3
27	12	7	10	8	6	7	7	3	5	3	1	2	4
28	14	8	11	9	6	8	8	4	6	3	1	2	4
29	16	9	13	11	7	9	8	4	6	4	2	3	5
30	19	10	14	12	8	10	10	5	7	4	2	3	5
31	20	11	16	13	9	11	10	6	8	5	2	4	6
32	23	12	18	15	10	13	11	7	9	6	2	4	7
33	24	14	19	17	11	14	12	8	10	6	3	4	7
34	26	17	21	18	12	15	14	9	11	7	4	5	8
35	28	18	23	20	14	17	15	10	12	8	5	6	9
36	31	20	25	21	16	19	16	11	14	8	6	7	10
37	34	22	28	24	18	21	17	13	15	10	8	9	11
38	37	24	31	25	19	22	18	16	17	11	8	10	13
39	40	26	33	27	22	25	20	17	19	12	9	11	14
40	42	29	35	29	23	26	23	20	21	15	11	13	16
41	45	32	39	31	26	29	25	23	24	16	13	14	18
42	48	34	41	33	29	31	28	26	27	18	14	16	20
43	51	38	44	37	32	34	30	29	29	21	17	19	23
44	52	42	47	42	36	39	34	33	33	24	20	22	26
45	55	46	51	45	39	42	38	35	36	25	23	24	29
46	57	50	54	47	42	45	40	38	39	29	25	27	31
47	60	54	57	50	45	48	43	42	42	34	28	30	35
48	62	57	60	54	49	52	46	46	46	36	31	34	38
49	66	62	64	57	52	55	49	49	49	38	35	37	41
50	70	65	68	60	57	59	53	53	53	41	39	40	45
51	73	69	71	63	60	62	57	58	58	46	43	45	49
52	77	72	74	67	66	66	61	62	61	52	50	51	54
53	80	76	78	71	68	69	64	67	65	59	57	58	58
54	84	79	82	76	73	75	68	72	70	63	63	63	63
55	87	84	85	82	77	79	72	76	74	69	69	69	68
56	90	87	88	86	79	82	76	80	78	75	74	74	73
57	92	90	91	89	85	87	81	84	83	80	78	79	77
58	94	92	93	90	87	89	83	87	85	83	82	82	81
59	95	94	95	93	91	92	87	89	88	89	86	87	85
60	96	94	95	95	93	94	91	92	91	92	89	90	88
61	97	95	96	95	93	94	92	93	93	93	91	92	89
62	98	96	97	97	94	96	94	96	95	95	93	94	92
63	99	97	98	98	97	97	97	98	97	97	95	96	95
64	99	98	98	98	98	98	98	99	98	98	97	97	96
65	99	99	99	99	98	98	98	99	99	98	97	98	97
66	99	99	99	99	98	98	98	99	99	98	97	98	97
67	99	99	99	99	99	99	99	99	99	99	98	98	98
68	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-9. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Verbal (VE)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
19	1	1	1	1	1	1	1	1	1	1	1	1	1
20	2	1	1	1	2	2	1	1	1	1	1	1	1
21	3	2	2	1	2	2	1	1	1	1	1	1	1
22	3	3	3	1	2	2	1	1	1	1	1	1	1
23	4	3	3	2	3	2	2	1	2	1	1	1	1
24	5	3	4	2	3	3	2	2	2	1	1	1	1
25	6	4	5	3	3	3	3	2	2	1	1	1	2
26	7	5	6	4	4	4	3	3	3	1	1	1	2
27	8	6	7	4	4	4	4	4	4	1	1	1	3
28	10	7	8	6	5	5	4	4	4	2	1	2	3
29	12	8	10	6	6	6	5	4	5	2	1	2	4
30	14	9	11	7	7	7	6	5	5	2	2	2	4
31	17	11	14	9	8	8	7	6	6	3	3	3	5
32	19	12	16	10	9	10	8	6	7	3	4	3	6
33	21	14	18	11	11	11	10	7	8	3	4	4	6
34	23	16	19	15	13	14	11	8	10	5	5	5	7
35	26	18	22	17	15	16	12	10	11	5	5	5	8
36	28	21	24	20	18	19	13	12	12	6	6	6	9
37	32	25	29	22	20	21	15	14	14	7	7	7	11
38	35	28	32	24	22	23	17	17	17	8	8	8	12
39	37	31	34	26	25	26	19	20	19	11	10	10	14
40	40	36	38	28	29	28	21	22	22	14	12	13	17
41	43	38	41	31	31	31	23	25	24	16	14	15	19
42	46	42	44	33	34	34	26	28	27	17	16	17	22
43	49	44	47	38	37	37	28	33	30	19	18	19	24
44	51	48	49	40	41	41	31	36	34	23	21	22	27
45	56	51	54	44	44	44	35	40	37	25	25	25	30
46	59	56	58	48	48	48	39	45	42	28	28	28	34
47	65	60	63	52	51	52	42	48	45	32	33	32	37
48	68	65	67	58	56	57	47	52	49	34	37	36	40
49	71	70	70	61	60	61	51	56	54	39	42	41	44
50	75	74	75	65	65	65	56	61	58	45	49	47	48
51	77	78	78	69	69	69	60	66	63	49	53	51	53
52	81	83	82	72	73	73	63	70	67	55	56	56	56
53	86	86	86	77	77	77	68	75	72	60	61	60	61
54	88	88	88	80	81	81	72	81	76	65	65	65	65
55	91	90	91	86	84	85	77	84	81	70	70	70	69
56	93	93	93	88	86	87	81	87	84	74	76	75	73
57	95	94	95	91	90	90	84	91	87	80	81	80	76
58	96	95	96	94	92	93	86	92	89	84	84	84	80
59	97	97	97	95	93	94	89	93	91	89	86	87	84
60	98	97	97	96	94	95	92	95	93	92	88	90	86
61	98	97	98	97	95	96	94	96	95	93	90	92	89
62	98	99	99	98	96	97	95	97	96	95	92	93	91
63	99	99	99	98	97	97	96	98	97	96	93	94	93
64	99	99	99	98	97	98	97	99	98	96	95	96	94
65	99	99	99	99	98	98	98	99	99	98	97	97	96
66	99	99	99	99	98	99	99	99	99	98	98	98	97
67	99	99	99	99	99	99	99	99	99	99	98	99	98
68	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-10. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Subtest Word Knowledge (WK)

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
19	1	1	1	1	1	1	1	1	1	1	1	1	1
20	2	1	1	1	2	1	1	1	1	1	1	1	1
21	2	1	2	1	2	1	1	1	1	1	1	1	1
22	3	2	2	2	2	2	1	1	1	1	1	1	1
23	4	2	3	2	2	2	1	1	1	1	1	1	1
24	4	3	3	2	2	2	1	1	1	1	1	1	1
25	4	4	4	2	3	3	2	1	2	1	1	1	2
26	6	4	5	2	4	3	2	2	2	1	1	1	2
27	7	5	6	3	4	4	3	2	2	2	1	2	2
28	7	7	7	4	5	4	3	3	3	2	2	2	3
29	9	7	8	5	6	5	3	4	3	2	2	2	3
30	11	8	9	6	6	6	3	4	4	3	3	3	4
31	13	10	11	7	8	7	5	5	5	3	3	3	4
32	14	11	13	7	9	8	6	6	6	3	3	3	5
33	16	14	15	9	10	10	8	7	7	3	4	4	5
34	18	16	17	10	13	11	8	8	8	4	4	4	6
35	21	19	20	13	15	14	9	10	10	5	5	5	7
36	24	23	24	15	17	16	11	12	11	5	7	6	9
37	27	26	26	18	20	19	12	14	13	6	8	7	10
38	30	29	29	22	23	23	14	18	16	8	9	9	12
39	32	32	32	24	25	25	16	20	18	11	10	11	14
40	35	35	35	26	29	28	19	23	21	12	12	12	16
41	38	40	39	30	32	31	22	27	24	14	16	15	19
42	42	44	43	33	36	34	24	31	28	17	18	17	22
43	47	47	47	35	40	37	27	35	31	19	21	20	25
44	50	50	50	39	43	41	31	37	34	21	23	22	28
45	53	55	54	40	48	44	34	43	38	24	28	26	31
46	57	61	59	46	51	48	37	48	42	29	33	31	34
47	61	64	63	51	55	53	41	50	45	32	39	36	38
48	67	69	68	55	59	57	46	55	50	37	43	41	43
49	71	73	72	61	64	62	50	59	55	43	48	46	46
50	75	78	77	66	69	67	55	66	60	46	51	49	50
51	79	82	81	71	71	71	59	70	65	50	55	52	54
52	83	85	84	77	77	77	65	75	70	54	58	56	57
53	87	88	88	80	81	81	71	80	76	59	62	61	62
54	90	91	90	84	84	84	75	83	79	64	67	66	66
55	92	92	92	87	88	87	79	86	83	69	72	71	70
56	94	94	94	89	90	89	82	90	86	75	75	75	74
57	95	96	95	92	91	92	85	92	88	80	81	80	77
58	97	97	97	93	92	93	87	93	90	84	84	84	81
59	97	97	97	95	94	95	90	95	92	87	86	87	84
60	97	98	98	96	95	95	92	96	94	89	88	89	86
61	98	98	98	96	96	96	94	97	95	91	90	91	89
62	98	99	99	97	96	97	95	98	96	93	93	93	91
63	98	99	99	98	96	97	96	98	97	95	94	94	92
64	99	99	99	99	97	98	97	98	98	97	94	95	94
65	99	99	99	99	98	98	98	99	99	98	95	96	95
66	99	99	99	99	98	99	98	99	99	98	97	97	96
67	99	99	99	99	99	99	99	99	99	98	97	98	97
68	99	99	99	99	99	99	99	99	99	99	98	99	98
69	99	99	99	99	99	99	99	99	99	99	99	99	98
70	99	99	99	99	99	99	99	99	99	99	99	99	98
71	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-11. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Math Skills Composite

SSS	10th grade			11th grade			12th grade			Postsecondary			YP
	M	F	C	M	F	C	M	F	C	M	F	C	
21	1	1	1	1	1	1	1	1	1	1	1	1	1
22	2	1	1	1	1	1	1	1	1	1	1	1	1
23	2	1	2	2	2	2	1	1	1	1	1	1	1
24	3	1	2	2	2	2	2	1	1	1	1	1	1
25	3	2	3	3	3	3	2	2	2	1	1	1	1
26	4	2	3	3	4	3	3	2	3	1	1	1	2
27	6	3	4	3	4	4	3	2	3	1	1	1	2
28	7	4	6	4	4	4	5	3	4	1	1	1	3
29	8	5	6	5	5	5	5	3	4	1	1	1	3
30	9	5	7	5	6	6	6	3	5	2	1	1	3
31	10	6	8	6	6	6	6	4	5	2	1	1	4
32	11	8	10	7	6	6	7	5	6	2	1	1	5
33	13	9	11	7	8	7	7	6	7	2	1	2	5
34	14	11	13	9	8	8	8	8	8	3	1	2	6
35	15	13	14	9	10	10	9	9	9	3	2	3	8
36	19	14	17	11	12	11	10	10	10	4	2	3	9
37	22	17	20	13	13	13	11	12	11	4	4	4	11
38	24	20	22	15	15	15	12	14	13	7	6	6	13
39	26	22	24	16	17	17	14	16	15	9	7	8	15
40	29	26	27	19	20	19	15	19	17	9	9	9	17
41	30	28	29	20	20	20	15	20	18	10	11	11	19
42	34	31	32	22	23	23	17	22	19	12	13	13	22
43	36	34	35	27	27	27	19	26	22	14	17	15	25
44	40	38	39	30	31	31	21	31	26	15	20	18	28
45	45	43	44	34	35	34	25	34	30	19	24	22	32
46	50	48	49	37	38	38	27	38	33	22	30	26	36
47	54	52	53	41	42	42	30	44	37	25	35	30	40
48	60	56	58	46	46	46	34	47	41	30	39	35	44
49	64	63	63	52	51	51	40	50	45	36	43	40	47
50	66	66	66	54	53	54	43	52	48	39	46	43	50
51	69	71	70	60	57	59	49	58	53	44	53	49	54
52	73	75	74	64	63	63	52	63	58	50	58	54	58
53	76	79	78	66	67	67	57	68	62	55	64	60	62
54	79	83	81	71	71	71	61	73	67	61	69	65	66
55	82	85	84	74	75	74	65	76	71	68	75	71	71
56	85	88	86	77	77	77	69	79	74	72	78	75	74
57	88	89	89	80	80	80	73	80	77	77	82	80	77
58	90	92	91	82	83	82	76	83	79	79	85	82	80
59	92	94	93	83	87	85	79	85	82	83	88	85	83
60	93	95	94	84	88	86	81	86	83	85	90	87	84
61	94	96	95	88	90	89	82	88	85	87	92	90	87
62	95	98	96	90	92	91	84	89	87	89	94	92	89
63	96	98	97	93	94	93	87	93	90	92	95	94	91
64	98	99	98	94	96	95	89	95	92	94	96	95	93
65	98	99	99	95	97	96	92	96	94	96	98	97	95
66	99	99	99	96	98	97	94	99	96	97	99	98	96
67	99	99	99	98	99	98	96	99	98	98	99	99	97
68	99	99	99	99	99	99	97	99	98	98	99	99	98
69	99	99	99	99	99	99	97	99	99	99	99	99	98
70	99	99	99	99	99	99	98	99	99	99	99	99	99
71	99	99	99	99	99	99	98	99	99	99	99	99	99
72	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-12. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Science and Technical Skills Composite

<u>SSS</u>	<u>10th grade</u>			<u>11th grade</u>			<u>12th grade</u>			<u>Postsecondary</u>			<u>YP</u>
	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	
22	1	1	1	1	1	1	1	1	1	1	1	1	1
23	2	1	1	1	1	1	1	1	1	1	1	1	1
24	3	2	2	1	2	1	1	1	1	1	1	1	1
25	3	2	3	2	2	2	1	1	1	1	1	1	1
26	4	3	4	2	3	3	1	2	2	1	1	1	1
27	5	4	5	3	4	4	2	3	2	1	1	1	1
28	6	5	6	3	5	4	2	3	3	1	1	1	2
29	8	7	8	4	6	5	3	4	4	1	1	1	2
30	9	9	9	4	6	5	4	5	4	1	1	1	3
31	11	10	10	5	8	7	4	5	5	1	2	1	4
32	12	11	12	6	9	8	6	7	6	1	3	2	5
33	13	12	12	8	10	9	7	8	7	1	4	3	6
34	15	16	15	9	11	10	8	11	9	2	6	4	7
35	17	18	17	10	14	12	10	12	11	2	7	5	9
36	19	22	20	11	16	14	11	14	12	3	8	5	10
37	21	26	23	13	20	17	12	16	14	5	11	8	12
38	24	29	27	14	23	19	12	19	16	6	14	10	13
39	25	32	28	16	26	20	13	21	17	7	16	12	15
40	28	37	33	18	29	24	15	25	20	9	19	14	17
41	30	41	36	21	35	28	17	29	23	10	24	18	20
42	33	44	38	23	38	30	19	32	25	11	27	19	22
43	38	49	43	24	42	33	21	36	29	13	32	23	25
44	41	54	47	29	47	38	23	42	33	15	37	26	28
45	43	57	50	31	51	41	24	47	36	17	40	29	31
46	49	61	55	36	55	46	28	53	40	21	45	34	35
47	53	68	60	42	61	51	31	61	46	23	50	37	38
48	56	73	64	45	66	55	34	65	50	25	54	41	42
49	61	79	69	49	72	61	40	72	56	30	61	47	46
50	64	83	73	56	78	67	43	76	60	34	69	53	51
51	68	86	77	61	81	71	48	81	64	39	76	58	56
52	72	89	80	64	84	74	52	84	68	42	78	61	59
53	77	91	84	67	87	77	57	87	72	46	83	65	64
54	80	93	86	73	90	81	61	90	76	51	88	71	69
55	83	95	88	75	92	83	65	92	78	56	89	73	71
56	84	96	90	79	94	87	69	93	81	62	90	77	75
57	86	97	91	82	97	89	74	95	84	65	93	80	79
58	87	98	92	85	97	91	76	96	86	68	94	82	81
59	90	98	94	88	98	93	79	98	88	73	95	85	84
60	92	99	95	90	98	94	82	99	90	77	97	88	86
61	93	99	96	90	99	94	84	99	91	80	97	89	88
62	94	99	97	94	99	96	87	99	93	85	98	92	90
63	96	99	98	95	99	97	89	99	94	88	98	93	92
64	97	99	98	95	99	97	89	99	94	90	99	95	93
65	98	99	99	96	99	98	93	99	96	92	99	96	94
66	99	99	99	97	99	98	95	99	97	94	99	97	95
67	99	99	99	97	99	98	95	99	97	94	99	97	96
68	99	99	99	97	99	99	96	99	98	96	99	98	97
69	99	99	99	98	99	99	97	99	99	97	99	98	97
70	99	99	99	98	99	99	97	99	99	97	99	99	98
71	99	99	99	98	99	99	98	99	99	97	99	99	98
72	99	99	99	99	99	99	98	99	99	98	99	99	99
73	99	99	99	99	99	99	98	99	99	98	99	99	99
74	99	99	99	99	99	99	99	99	99	99	99	99	99

Table A-13. Male (M), Female (F), Combined-Gender (C), and Youth Population (YP) Norms for the ASVAB Verbal Skills Composite

<u>SSS</u>	<u>10th grade</u>			<u>11th grade</u>			<u>12th grade</u>			<u>Postsecondary</u>			<u>YP</u>
	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	
19	1	1	1	1	1	1	1	1	1	1	1	1	1
20	2	1	1	1	2	2	1	1	1	1	1	1	1
21	3	2	2	1	2	2	1	1	1	1	1	1	1
22	3	3	3	1	2	2	1	1	1	1	1	1	1
23	4	3	3	2	3	2	2	1	2	1	1	1	1
24	5	3	4	2	3	3	2	2	2	1	1	1	1
25	6	4	5	3	3	3	3	2	2	1	1	1	2
26	7	5	6	4	4	4	3	3	3	1	1	1	2
27	8	6	7	4	4	4	4	4	4	1	1	1	3
28	10	7	8	6	5	5	4	4	4	2	1	2	3
29	12	8	10	6	6	6	5	4	5	2	1	2	4
30	14	9	11	7	7	7	6	5	5	2	2	2	4
31	17	11	14	9	8	8	7	6	6	3	3	3	5
32	19	12	16	10	9	10	8	6	7	3	4	3	6
33	21	14	18	11	11	11	10	7	8	3	4	4	6
34	23	16	19	15	13	14	11	8	10	5	5	5	7
35	26	18	22	17	15	16	12	10	11	5	5	5	8
36	28	21	24	20	18	19	13	12	12	6	6	6	9
37	32	25	29	22	20	21	15	14	14	7	7	7	11
38	35	28	32	24	22	23	17	17	17	8	8	8	12
39	37	31	34	26	25	26	19	20	19	11	10	10	14
40	40	36	38	28	29	28	21	22	22	14	12	13	17
41	43	38	41	31	31	31	23	25	24	16	14	15	19
42	46	42	44	33	34	34	26	28	27	17	16	17	22
43	49	44	47	38	37	37	28	33	30	19	18	19	24
44	51	48	49	40	41	41	31	36	34	23	21	22	27
45	56	51	54	44	44	44	35	40	37	25	25	25	30
46	59	56	58	48	48	48	39	45	42	28	28	28	34
47	65	60	63	52	51	52	42	48	45	32	33	32	37
48	68	65	67	58	56	57	47	52	49	34	37	36	40
49	71	70	70	61	60	61	51	56	54	39	42	41	44
50	75	74	75	65	65	65	56	61	58	45	49	47	48
51	77	78	78	69	69	69	60	66	63	49	53	51	53
52	81	83	82	72	73	73	63	70	67	55	56	56	56
53	86	86	86	77	77	77	68	75	72	60	61	60	61
54	88	88	88	80	81	81	72	81	76	65	65	65	65
55	91	90	91	86	84	85	77	84	81	70	70	70	69
56	93	93	93	88	86	87	81	87	84	74	76	75	73
57	95	94	95	91	90	90	84	91	87	80	81	80	76
58	96	95	96	94	92	93	86	92	89	84	84	84	80
59	97	97	97	95	93	94	89	93	91	89	86	87	84
60	98	97	97	96	94	95	92	95	93	92	88	90	86
61	98	97	98	97	95	96	94	96	95	93	90	92	89
62	98	99	99	98	96	97	95	97	96	95	92	93	91
63	99	99	99	98	97	97	96	98	97	96	93	94	93
64	99	99	99	98	97	98	97	99	98	96	95	96	94
65	99	99	99	99	98	98	98	99	99	98	97	97	96
66	99	99	99	99	98	99	99	99	99	98	98	98	97
67	99	99	99	99	99	99	99	99	99	99	98	99	98
68	99	99	99	99	99	99	99	99	99	99	99	99	99

