



**NFER**

Classroom

maths

year

**5**

supplement to  
teacher guide  
summer

5

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To access the score converter and question grid spreadsheets, you will need to go to our secure School Portal on the NFER's website:

[www.nfer.ac.uk/portal](http://www.nfer.ac.uk/portal)

and then enter your

NFER Number: .....

Project Number: .....

Unique Password: .....

(please write them in above for quick reference).

The letter and despatch notes that accompanied the test materials are pre-populated with the details of the numbers and password.

If you have lost the letter and despatch notes, the portal website has links where you can request your details again.

## Using the outcomes of the test

This section provides teachers with information to convert pupils' test scores into more useful measures of their attainment.

If the Year 5 mathematics test is undertaken and marked in line with the guidance in this booklet, then both a standardised score and an age standardised score can be derived from a pupil's test score.

Standardised scores enable a comparison to be made between the performance of a pupil and that of other pupils who have taken the test. In the case of the NFER tests, age standardised scores mean that the comparison is with pupils who have the same month of birth.

The starting point for both of these outcomes is to total a pupil's marks from the three mathematics booklets. A box is provided on the front cover of each test booklet to assist in this. This gives each pupil's total score or 'raw' score.

In order to obtain reliable outcomes, you should administer the test according to the guidance given in the teacher guide. It is particularly important that you observe the time limits given in the test instructions, and mark questions strictly according to the mark scheme. If not, the information derived from this section cannot be used reliably.

If you wish to record and explore patterns of performance on the test across your whole class, you may find it helpful to complete a question grid. For each question, the question grid shows the average mark of pupils in the standardisation sample. It also shows which questions address each of the elements of the Programme of Study. Completing pupils' scores in the question grid will enable you to compare performance on different areas of the Programme of Study with a nationally representative sample. This is available from the following website, which will require online registration for access:

[www.nfer.ac.uk/portal](http://www.nfer.ac.uk/portal)

### Standardised scores

Standardised scores enable a comparison to be made between the performance of a pupil and that of other pupils who have taken the same test. The average standardised score is set at 100, based on the performance of a nationally representative sample. About two-thirds of pupils will have standardised scores between 85 and 115 and scores within this range can be broadly described as 'average'.

Almost all pupils fall within the range 70 to 140, so scores outside this range can be regarded as exceptional. These exceptional scores are marked with \*\*\* on the charts opposite as standardised scores cannot be calculated with the necessary statistical reliability. If an exact score is needed, for example to calculate an average score for the class, 69 or 141 should be used as appropriate for these pupils.

For example, a teacher administered the test to her class. One pupil, Lucy, achieved a raw score of 53 on the test, giving her a standardised score of 103. The teacher could then say that Lucy achieved an average score on the test.

It is worth noting here that the scaled score of 100 defined by the Department for Education as the national expectation at the end of Key Stage 2 is **not the same as, nor equivalent to, a standardised score of 100 on these tests**. On these tests, a standardised score of 100 represents the average performance, based on a normal distribution, of the sample of pupils on which the tests were standardised. At the end of Key Stage 2, the scaled score of 100 represents the 'expected standard' and is not the average.

In order to save time and ensure accuracy, you can download a spreadsheet which will calculate each pupil's standardised score if you enter their raw score. This spreadsheet is available from the following website: [www.nfer.ac.uk/portal](http://www.nfer.ac.uk/portal)

Raw score	Standardised score
0	***
1	***
2	***
3	***
4	***
5	***
6	70
7	72
8	74
9	75
10	76
11	77
12	79
13	80
14	81
15	82
16	83
17	84
18	85
19	85
20	86
21	87
22	88
23	88
24	89
25	90
26	91
27	91
28	92
29	93
30	93
31	94
32	94
33	95
34	95
35	96
36	96

Raw score	Standardised score
37	97
38	97
39	97
40	98
41	98
42	99
43	99
44	100
45	100
46	100
47	101
48	101
49	101
50	102
51	102
52	103
53	103
54	104
55	104
56	104
57	105
58	105
59	106
60	106
61	107
62	107
63	107
64	108
65	108
66	108
67	109
68	109
69	110
70	110
71	111
72	111
73	111

Raw score	Standardised score
74	112
75	112
76	113
77	113
78	114
79	114
80	115
81	115
82	116
83	116
84	117
85	117
86	118
87	119
88	119
89	120
90	120
91	121
92	122
93	123
94	123
95	124
96	125
97	126
98	127
99	128
100	129
101	130
102	132
103	133
104	135
105	137
106	140
107	***
108	***
109	***
110	***

## Confidence bands

Confidence bands are used to show the extent of the margin of error in the standardised scores. In other words, they show how accurately the test measures pupils' ability in mathematics.

The margin of error is simply a statistical estimate, based on the fact that tests can only sample the particular area of learning which they assess and that therefore the score a pupil achieves may vary within a few points of their 'true score'. To indicate how wide this margin of error is likely to be, a '90 per cent confidence band' has been calculated. This means that you can have 90 per cent certainty that the true score lies within the confidence band.

The table below gives the numbers that should be subtracted from and added to pupils' standardised scores at different score points to form the 90 per cent confidence bands.

Standardised score	To form 90% confidence band:	
	subtract	add
70, 72, 74, 75 - 77, 79 - 81	3	5
82 - 118	4	4
119 - 130, 132, 133, 135, 137, 140	5	3

Take three pupils, Rachel, Nathan and David, with standardised scores of 101, 99 and 124 respectively. For Rachel, with a standardised score of 101 on this test, the 90 per cent confidence band is plus or minus 4. Therefore, you can be 90 per cent certain (there is a nine-out-of-ten chance) that Rachel's true score is between 97 and 105.

Both Nathan, who has a standardised score of 99, and Rachel are working at about the average for their age. Nathan's true score is between 95 and 103.

However, David, with a standardised score of 124, achieved an above average score on the test and has a 90 per cent likelihood of having a true score between 119 and 127.

For high and low scores, the confidence bands are asymmetrical (they tend to be pulled towards the average test score).

### Age standardised scores

Age standardised scores take into account a pupil's age in years and months at the time of sitting the test, in order that his or her performance can be compared with the performance of other pupils of the same age in a nationally representative sample. The age standardisation that has been undertaken means that these tests can be administered at different points in the school year and comparative information still be obtained. The age standardised scores in this booklet cover the age range 9 years 0 months to 10 years 11 months. If you have decided to give the test to pupils outside this range, you will not be able to use the table. You will still, though, be able to calculate an indication of attainment of age-related expectations on the new National Curriculum and also standardised scores.

In order to save time and ensure accuracy, you can download a spreadsheet, which will calculate each pupil's age standardised score if you enter their date of birth and date of test, from [www.nfer.ac.uk/portal](http://www.nfer.ac.uk/portal)

If you have not downloaded the spreadsheet, you should convert the total score into an age standardised score as follows:

- list the ages of all pupils in your class in years and completed months at the time of testing
- for each pupil, locate his or her age in years and months along the top of the table
- locate the pupil's total score down the left side of the table
- read off the age standardised score from where the row and column meet.

The average age standardised score is set at 100, based on the performance of a nationally representative sample. About two-thirds of pupils will have age standardised scores between 85 and 115 and scores within this range can broadly be described as 'average'. Almost all pupils fall within the range 70 to 140, so scores outside this range can be regarded as exceptional. These exceptional scores are marked with \*\*\* on the chart on pages 10-15 as age standardised scores cannot be calculated with the necessary statistical reliability. If an exact score is needed, for example to calculate an average for the class, 69 or 141 should be used as appropriate for these pupils.

## Confidence bands

Confidence bands are used to show the extent of the margin of error in the age standardised scores. In other words, how accurately the test measures the pupils' ability in mathematics.

The margin of error is simply a statistical estimate, based on the fact that tests can only sample the particular area of learning which they assess and therefore the score a pupil achieves may vary within a few points of their 'true score'. To indicate how wide this margin of error is likely to be, a '90 per cent confidence band' has been calculated. This means that you can have 90 per cent certainty that the true score lies within the confidence band.

The table below gives the numbers that should be added to and subtracted from pupils' age standardised scores in different score ranges to form the 90% confidence bands.

Age standardised score range	To form 90% confidence band:	
	subtract	add
70 - 81	3	5
82 - 118	4	4
119 - 140	5	3

Take four pupils, Hannah, Rachel, Ali and Stephen, with age standardised scores of 100, 99, 103 and 122 respectively. For Hannah, with an age standardised score of 100 on this test, the 90 per cent confidence band is plus or minus 4. Therefore, you can be 90 per cent certain (there is a nine-out-of-ten chance) that Hannah's true score is between 96 and 104.

Both Rachel, who has an age standardised score of 99, and Ali, who has an age standardised score of 103, are working at about the average for their age. Rachel's true score is between 95 and 103, and Ali's is between 99 and 107. Hannah's score of 100 also indicates that she is working at about the average for her age.

However, Stephen, with an age standardised score of 122, achieved an above average score on the test and has a 90 per cent likelihood of having a true score between 117 and 125.

For high and low scores, the confidence bands are asymmetrical (they tend to be pulled towards the average test score).

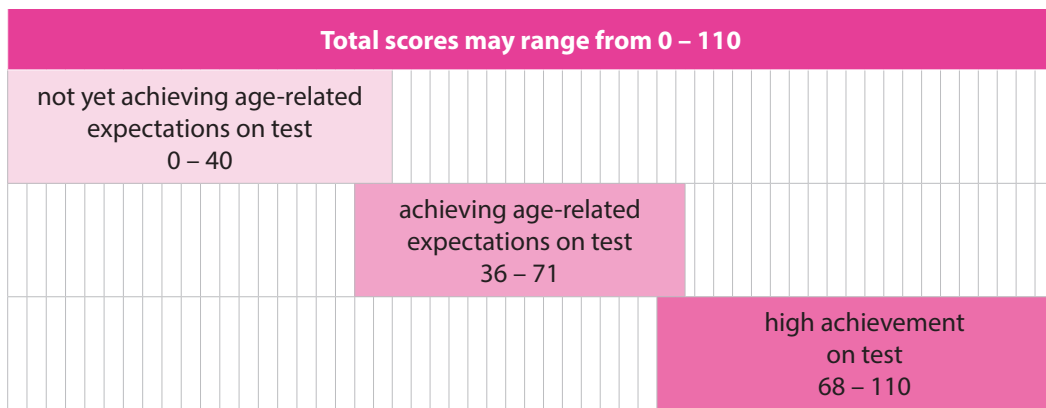


### Age-related expectations in the National Curriculum

The result of the test contributes to the judgement of whether a pupil is meeting the age-related expectations in the National Curriculum. A series of standard setting meetings involving over 100 teachers has provided another source of evidence about the level of challenge in the new tests in relation to the National Curriculum expectations.

Clearly the tests can only cover certain areas from the National Curriculum. Areas such as mental arithmetic skills cannot be assessed due to the nature of a written test.

Test outcomes should inform rather than determine teachers’ own assessment decisions, and therefore a range of marks is suggested in the table below. Some pupils perform better in formal assessments than their day to day work suggests, whilst others underperform. In this case, it is suggested that teachers consider the overall performance of pupils who score between 36 and 40 marks on this test before deciding if they have met age-related expectations.



	total score
Not yet achieving age-related expectations	0 – 40
Achieving age-related expectations	36 – 71
High achievement	68 – 110

# Age standardised scores

Age in years and completed months													
Total score	9.00	9.01	9.02	9.03	9.04	9.05	9.06	9.07	9.08	9.09	9.10	9.11	Total score
0	***	***	***	***	***	***	***	***	***	***	***	***	0
1	***	***	***	***	***	***	***	***	***	***	***	***	1
2	***	***	***	***	***	***	***	***	***	***	***	***	2
3	70	***	***	***	***	***	***	***	***	***	***	***	3
4	73	73	72	72	71	70	70	***	***	***	***	***	4
5	76	75	75	74	74	73	73	72	71	71	70	70	5
6	78	78	77	77	76	75	75	74	74	73	73	72	6
7	80	80	79	78	78	77	77	76	76	75	74	74	7
8	82	82	81	80	80	79	78	78	77	77	76	76	8
9	84	83	83	82	81	81	80	79	79	78	78	77	9
10	85	85	84	83	83	82	81	81	80	80	79	78	10
11	87	86	85	85	84	84	83	82	82	81	80	80	11
12	88	87	87	86	85	85	84	83	83	82	82	81	12
13	89	89	88	87	87	86	85	85	84	83	83	82	13
14	90	90	89	88	88	87	86	86	85	84	84	83	14
15	91	91	90	89	89	88	87	87	86	86	85	84	15
16	92	92	91	90	90	89	88	88	87	86	86	85	16
17	93	93	92	91	91	90	89	89	88	87	87	86	17
18	94	94	93	92	92	91	90	90	89	88	88	87	18
19	95	94	94	93	93	92	91	91	90	89	89	88	19
20	96	95	94	94	93	93	92	91	91	90	89	89	20
21	96	96	95	95	94	93	93	92	92	91	90	90	21
22	97	96	96	95	95	94	94	93	92	92	91	90	22
23	97	97	96	96	95	95	94	94	93	92	92	91	23
24	98	97	97	96	96	95	95	94	94	93	92	92	24
25	99	98	98	97	96	96	95	95	94	94	93	92	25
26	99	99	98	98	97	96	96	95	95	94	94	93	26
27	100	99	99	98	98	97	96	96	95	95	94	94	27
28	100	100	99	99	98	98	97	96	96	95	95	94	28
29	101	100	100	99	99	98	97	97	96	96	95	95	29
30	102	101	100	100	99	99	98	97	97	96	96	95	30
31	102	101	101	100	100	99	99	98	97	97	96	96	31
32	102	102	101	101	100	100	99	98	98	97	97	96	32
33	103	102	102	101	101	100	100	99	98	98	97	97	33
34	103	103	102	102	101	101	100	100	99	98	98	97	34
35	104	103	103	102	102	101	101	100	99	99	98	98	35
36	104	104	103	103	102	102	101	101	100	99	99	98	36
37	105	104	103	103	103	102	102	101	100	100	99	99	37
38	105	104	104	103	103	102	102	101	101	100	100	99	38
39	105	105	104	104	103	103	102	102	101	101	100	100	39
40	106	105	105	104	104	103	103	102	102	101	101	100	40

Age in years and completed months													
Total score	10.00	10.01	10.02	10.03	10.04	10.05	10.06	10.07	10.08	10.09	10.10	10.11	Total score
0	***	***	***	***	***	***	***	***	***	***	***	***	0
1	***	***	***	***	***	***	***	***	***	***	***	***	1
2	***	***	***	***	***	***	***	***	***	***	***	***	2
3	***	***	***	***	***	***	***	***	***	***	***	***	3
4	***	***	***	***	***	***	***	***	***	***	***	***	4
5	***	***	***	***	***	***	***	***	***	***	***	***	5
6	71	71	70	70	***	***	***	***	***	***	***	***	6
7	73	73	72	72	71	70	70	***	***	***	***	***	7
8	75	74	74	73	73	72	72	71	70	70	***	***	8
9	76	76	75	75	74	74	73	72	72	71	71	70	9
10	78	77	77	76	75	75	74	74	73	73	72	71	10
11	79	78	78	77	77	76	76	75	74	74	73	73	11
12	80	80	79	78	78	77	77	76	76	75	74	74	12
13	81	81	80	79	79	78	78	77	77	76	75	75	13
14	83	82	81	81	80	79	79	78	78	77	76	76	14
15	84	83	82	82	81	80	80	79	78	78	77	77	15
16	85	84	83	83	82	81	81	80	79	79	78	78	16
17	85	85	84	84	83	82	82	81	80	80	79	78	17
18	86	86	85	84	84	83	82	82	81	81	80	79	18
19	87	87	86	85	85	84	83	83	82	81	81	80	19
20	88	87	87	86	85	85	84	84	83	82	82	81	20
21	89	88	87	87	86	86	85	84	84	83	82	82	21
22	90	89	88	88	87	86	86	85	84	84	83	82	22
23	90	90	89	88	88	87	86	86	85	85	84	83	23
24	91	90	90	89	88	88	87	86	86	85	85	84	24
25	92	91	90	90	89	88	88	87	86	86	85	85	25
26	92	92	91	91	90	89	88	88	87	87	86	85	26
27	93	92	92	91	91	90	89	88	88	87	87	86	27
28	94	93	92	92	91	91	90	89	88	88	87	87	28
29	94	94	93	92	92	91	90	90	89	88	88	87	29
30	95	94	94	93	92	92	91	90	90	89	88	88	30
31	95	95	94	94	93	92	92	91	90	90	89	88	31
32	96	95	95	94	94	93	92	92	91	90	90	89	32
33	96	96	95	95	94	93	93	92	92	91	90	90	33
34	97	96	96	95	95	94	93	93	92	91	91	90	34
35	97	97	96	96	95	94	94	93	93	92	91	91	35
36	98	97	96	96	95	95	94	94	93	93	92	91	36
37	98	98	97	96	96	95	95	94	94	93	92	92	37
38	99	98	97	97	96	96	95	95	94	94	93	92	38
39	99	98	98	97	97	96	96	95	95	94	93	93	39
40	99	99	98	98	97	97	96	96	95	95	94	93	40

continued overleaf ...

## Age standardised scores (continued)

Total score	Age in years and completed months											Total score	
	9.00	9.01	9.02	9.03	9.04	9.05	9.06	9.07	9.08	9.09	9.10		9.11
41	106	106	105	105	104	104	103	103	102	102	101	101	41
42	107	106	106	105	105	104	103	103	103	102	102	101	42
43	107	107	106	106	105	104	104	103	103	102	102	101	43
44	108	107	107	106	105	105	104	104	103	103	102	102	44
45	108	108	107	107	106	105	105	104	104	103	103	102	45
46	109	108	108	107	106	106	105	105	104	103	103	103	46
47	109	109	108	108	107	106	106	105	104	104	103	103	47
48	110	109	109	108	107	107	106	105	105	104	104	103	48
49	110	109	109	108	108	107	107	106	105	105	104	104	49
50	110	110	109	109	108	108	107	106	106	105	105	104	50
51	111	110	110	109	109	108	108	107	106	106	105	104	51
52	111	111	110	110	109	108	108	107	107	106	105	105	52
53	112	111	110	110	109	109	108	108	107	107	106	105	53
54	112	111	111	110	110	109	109	108	108	107	106	106	54
55	112	112	111	111	110	110	109	109	108	107	107	106	55
56	113	112	112	111	111	110	110	109	108	108	107	107	56
57	113	113	112	111	111	110	110	109	109	108	108	107	57
58	113	113	112	112	111	111	110	110	109	109	108	108	58
59	114	113	113	112	112	111	111	110	110	109	109	108	59
60	114	114	113	113	112	112	111	111	110	109	109	108	60
61	115	114	114	113	113	112	111	111	110	110	109	109	61
62	115	114	114	113	113	112	112	111	111	110	110	109	62
63	115	115	114	114	113	113	112	112	111	111	110	110	63
64	116	115	115	114	114	113	113	112	112	111	111	110	64
65	116	116	115	115	114	114	113	113	112	111	111	110	65
66	117	116	116	115	114	114	113	113	112	112	111	111	66
67	117	117	116	115	115	114	114	113	113	112	112	111	67
68	118	117	116	116	115	115	114	114	113	113	112	112	68
69	118	118	117	116	116	115	115	114	114	113	113	112	69
70	119	118	117	117	116	116	115	115	114	113	113	112	70
71	119	118	118	117	117	116	115	115	114	114	113	113	71
72	120	119	118	118	117	117	116	115	115	114	114	113	72
73	120	119	119	118	118	117	116	116	115	115	114	114	73
74	121	120	119	119	118	118	117	116	116	115	115	114	74
75	121	120	120	119	119	118	117	117	116	116	115	115	75
76	121	121	120	120	119	119	118	117	117	116	116	115	76
77	122	121	121	120	120	119	118	118	117	117	116	116	77
78	122	122	121	121	120	120	119	118	118	117	117	116	78
79	123	122	122	121	121	120	120	119	118	118	117	117	79
80	123	123	122	122	121	121	120	119	119	118	118	117	80

Age in years and completed months													
Total score	10.00	10.01	10.02	10.03	10.04	10.05	10.06	10.07	10.08	10.09	10.10	10.11	Total score
41	100	99	99	98	98	97	97	96	95	95	94	94	41
42	100	100	99	99	98	98	97	96	96	95	95	94	42
43	101	100	100	99	99	98	97	97	96	96	95	95	43
44	101	101	100	100	99	98	98	97	97	96	96	95	44
45	102	101	101	100	99	99	98	98	97	97	96	96	45
46	102	102	101	100	100	99	99	98	98	97	96	96	46
47	102	102	101	101	100	100	99	99	98	97	97	96	47
48	103	102	102	101	101	100	100	99	98	98	97	97	48
49	103	103	102	102	101	101	100	99	99	98	98	97	49
50	103	103	103	102	102	101	100	100	99	99	98	98	50
51	104	103	103	102	102	101	101	100	100	99	99	98	51
52	104	104	103	103	102	102	101	101	100	100	99	98	52
53	105	104	104	103	103	102	102	101	101	100	99	99	53
54	105	105	104	103	103	103	102	102	101	100	100	99	54
55	106	105	104	104	103	103	102	102	101	101	100	100	55
56	106	105	105	104	104	103	103	102	102	101	101	100	56
57	106	106	105	105	104	104	103	103	102	102	101	101	57
58	107	106	106	105	105	104	103	103	103	102	102	101	58
59	107	107	106	106	105	104	104	103	103	102	102	101	59
60	108	107	107	106	105	105	104	104	103	103	102	102	60
61	108	108	107	106	106	105	105	104	104	103	103	102	61
62	109	108	108	107	106	106	105	104	104	103	103	103	62
63	109	109	108	107	107	106	106	105	104	104	103	103	63
64	109	109	108	108	107	107	106	105	105	104	104	103	64
65	110	109	109	108	108	107	106	106	105	105	104	104	65
66	110	110	109	109	108	108	107	106	106	105	104	104	66
67	111	110	110	109	109	108	107	107	106	106	105	104	67
68	111	111	110	110	109	108	108	107	107	106	105	105	68
69	112	111	110	110	109	109	108	108	107	107	106	105	69
70	112	111	111	110	110	109	109	108	108	107	106	106	70
71	112	112	111	111	110	110	109	109	108	108	107	106	71
72	113	112	112	111	111	110	110	109	109	108	107	107	72
73	113	113	112	112	111	111	110	110	109	108	108	107	73
74	114	113	113	112	112	111	110	110	109	109	108	108	74
75	114	114	113	112	112	111	111	110	110	109	109	108	75
76	115	114	113	113	112	112	111	111	110	110	109	109	76
77	115	114	114	113	113	112	112	111	111	110	110	109	77
78	115	115	114	114	113	113	112	112	111	111	110	110	78
79	116	115	115	114	114	113	113	112	112	111	111	110	79
80	117	116	115	115	114	114	113	113	112	112	111	111	80

continued overleaf ...

## Age standardised scores (continued)

Total score	Age in years and completed months											Total score	
	9.00	9.01	9.02	9.03	9.04	9.05	9.06	9.07	9.08	9.09	9.10		9.11
81	124	123	123	122	122	121	121	120	119	119	118	118	81
82	124	124	123	123	122	122	121	121	120	119	119	118	82
83	125	124	124	123	123	122	122	121	121	120	119	119	83
84	125	125	124	124	123	123	122	122	121	121	120	119	84
85	126	125	125	124	124	123	123	122	122	121	121	120	85
86	126	126	125	125	124	124	123	123	122	122	121	121	86
87	127	126	126	125	125	124	124	123	123	122	122	121	87
88	127	127	126	126	125	125	124	124	123	123	122	122	88
89	128	128	127	127	126	125	125	124	124	123	123	122	89
90	129	128	128	127	127	126	126	125	125	124	124	123	90
91	129	129	128	128	127	127	126	126	125	125	124	124	91
92	130	130	129	128	128	127	127	126	126	125	125	124	92
93	131	130	130	129	129	128	128	127	127	126	126	125	93
94	131	131	130	130	129	129	128	128	127	127	126	126	94
95	132	132	131	131	130	130	129	129	128	128	127	127	95
96	133	133	132	132	131	131	130	129	129	128	128	127	96
97	134	133	133	132	132	131	131	130	130	129	129	128	97
98	135	134	134	133	133	132	132	131	131	130	130	129	98
99	136	135	135	134	134	133	133	132	132	131	131	130	99
100	137	137	136	135	135	134	134	133	133	132	132	131	100
101	138	138	137	137	136	136	135	135	134	134	133	133	101
102	140	139	139	138	138	137	136	136	135	135	134	134	102
103	***	***	140	140	139	138	138	137	137	136	136	135	103
104	***	***	***	***	***	140	140	139	139	138	138	137	104
105	***	***	***	***	***	***	***	***	***	140	140	139	105
106	***	***	***	***	***	***	***	***	***	***	***	***	106
107	***	***	***	***	***	***	***	***	***	***	***	***	107
108	***	***	***	***	***	***	***	***	***	***	***	***	108
109	***	***	***	***	***	***	***	***	***	***	***	***	109
110	***	***	***	***	***	***	***	***	***	***	***	***	110

Age in years and completed months													
Total score	10.00	10.01	10.02	10.03	10.04	10.05	10.06	10.07	10.08	10.09	10.10	10.11	Total score
81	117	116	116	115	115	114	114	113	113	112	112	111	81
82	118	117	116	116	115	115	114	114	113	113	112	112	82
83	118	118	117	116	116	115	115	114	114	113	113	112	83
84	119	118	118	117	116	116	115	115	114	114	113	113	84
85	119	119	118	118	117	116	116	115	115	114	114	113	85
86	120	119	119	118	118	117	116	116	115	115	114	114	86
87	121	120	120	119	118	118	117	117	116	115	115	114	87
88	121	121	120	120	119	118	118	117	117	116	115	115	88
89	122	121	121	120	120	119	119	118	117	117	116	116	89
90	122	122	121	121	120	120	119	119	118	117	117	116	90
91	123	123	122	122	121	121	120	119	119	118	118	117	91
92	124	123	123	122	122	121	121	120	120	119	118	118	92
93	125	124	124	123	122	122	121	121	120	120	119	119	93
94	125	125	124	124	123	123	122	122	121	121	120	119	94
95	126	126	125	125	124	123	123	122	122	121	121	120	95
96	127	126	126	125	125	124	124	123	123	122	122	121	96
97	128	127	127	126	126	125	125	124	124	123	123	122	97
98	129	128	128	127	127	126	126	125	125	124	124	123	98
99	130	129	129	128	128	127	127	126	126	125	125	124	99
100	131	130	130	129	129	128	128	127	127	126	126	125	100
101	132	132	131	130	130	129	129	128	128	127	127	126	101
102	133	133	132	132	131	131	130	130	129	129	128	128	102
103	135	134	134	133	133	132	132	131	131	130	130	129	103
104	137	136	136	135	135	134	133	133	132	132	131	131	104
105	139	138	138	137	137	136	135	135	134	134	133	133	105
106	***	140	140	139	139	138	138	137	137	136	136	135	106
107	***	***	***	***	***	***	***	140	140	139	139	138	107
108	***	***	***	***	***	***	***	***	***	***	***	***	108
109	***	***	***	***	***	***	***	***	***	***	***	***	109
110	***	***	***	***	***	***	***	***	***	***	***	***	110



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