National Numeracy Tests

PROCEDURAL

9EP16MS

Markscheme

139124

Llywodraeth Cymru
Welsh Government

Markscheme

General marking rules

It is essential that you apply this markscheme, the marking guidance and the general marking rules given below to your own marking, in order for the standardised scores to be valid.

- Incorrect or unacceptable answers are given a mark of 0. No half marks are awarded.
- At the end of each double-page spread of marking, record the total number of marks in the 'total' box in the bottom right-hand corner. Check that the mark recorded does not exceed the maximum number of marks available.
- Once the marking has been completed, add up the total number of marks awarded. This is the total score and should be recorded on the cover of the test booklet and input onto the relevant mark sheet on the school's management information system, together with the details and date of the test taken.
- This data should then be submitted as part of the Welsh National Tests Data Collection (WNTDC). Further details are available from the *National Reading and Numeracy Tests – Test administration handbook 2016* on the Learning Wales website and in *Welsh National Tests Data Collection and reporting arrangements 2015/16* available on the Welsh Government website.
- Markers should record their initials on the cover of the test booklet to assist quality assurance.

Marking the modified tests

For learners using the modified large print or Braille test materials, some questions have been adapted or replaced. When marking a modified large print or Braille test, please use this markscheme alongside the adapted markscheme which is included in the *Notes for teachers* that accompany the modified tests.

Marking guidance

It is important that the tests are marked accurately. The questions and answers below help to develop a common understanding of how to mark fairly and consistently.

Must learners use the answer boxes?

Provided there is no ambiguity, learners can respond anywhere on the page. If there is more than one answer, the one in the answer box must be marked, even if incorrect. However, if the incorrect answer is clearly because of a transcription error (e.g. 65 has been copied as 56), mark the answer shown in the working.

Does it matter if the learner writes the answer differently from that shown in the markscheme?

Numerically equivalent answers (e.g. eight for 8, or two-quarters or 0.5 for half) should be marked as correct unless the markscheme states otherwise.

How should I mark answers involving money?

Money can be shown in pounds or pence, but a missing zero, e.g. £4.7, should be marked as incorrect unless the markscheme states otherwise.

How should I mark answers involving time?

In the real world, specific times are shown in a multiplicity of ways so accept, for example, 02:30, 2.30, half past 2, etc. Do not accept 2.3 as this is ambiguous. The same principle should be used for marking time intervals, e.g. for two and a half hours accept 2.5 but not 2.5pm.

What if the method is wrong but the answer is correct?

Unless the markscheme states otherwise, correct responses should be marked as correct even if the working is incorrect as learners may have started again without showing their revised approach.

What if the learner has shown understanding but has misread information in the question?

For a two (or more) mark item, if an incorrect answer arises from misreading information given in the question and the question has not become easier as a result, then deduct one mark only. For example, if the two-mark question is 86×67 and the learner records 96×67 then gives the answer 6432, one mark should be given. In a one-mark question, no marks can be given.

What should I do about crossed-out work?

Working which has been crossed-out and not replaced can be marked if it is still legible.

What is the difference between a numerical error and a conceptual error?

A numerical error is one in which a slip is made, e.g. within 86×67 the learner works out $6 \times 7 = 54$ within an otherwise correct response. A conceptual error is a more serious misunderstanding for which no method marks are available, e.g. if 86×60 is recorded as 516 rather than 5160

What if learners use a method that is not shown within the markscheme?

There can be a wide range of approaches to a question (e.g. long multiplication) and any correct method, however idiosyncratic, is acceptable.

In one-mark questions, the mark should be given for the correct answer, whatever the method used.

In two-mark questions, the correct answer should be given two marks, whatever the method used, unless the markscheme states otherwise. Most two-mark questions give one mark if the answer is incorrect but the learner shows a correct method: a correct method is one that would lead to a correct answer if there were no numerical errors.

9EP16 Procedural test: Markscheme

Q	Marks	Answer	Comments
1i	1m	3	
1ii	1m	$\frac{3}{4}$ or equivalent	
2	1m	£85	Accept £85.00
3	1m	4.1 or equivalent	
4	1m	325 euros	
5i	1m	6	
5ii	1m	270	
6	1m	10°C	
7	1m	6900	
8	1m	20	
9i	1m	$\frac{4}{25}$	Do not accept equivalent fractions, decimals or percentages
9ii	1m	60%	Do not accept equivalent fractions or decimals
10	1m	50 metres	
11	1m	£90	
12	1m	3.81	
13	1m	1050 grams	

Q	Marks	Answer	Comments
14i	1m	16 children	
14ii	1m	Negative	Accept inverse Ignore descriptors such as strong
15	2m	$1256cm^2$	Accept 1260 or 1300
	Or 1m	Shows $3.14 \times 20 \times 20$ or equivalent	Example for 1m: $\pi \times 20^2$
16i	1m	150	
16ii	1m	0.01 or equivalent	
16iii	1m	10	Accept 10^1
17	2m	2.15	Provided 2.15 (or $215 \div 100$) is shown in the working, accept 2 or 2.1 or 2.2
	Or 1m	Shows 215 Or Incorrect answer, but shows a method that would lead to 2.15 if calculated correctly, with not more than one numerical error	Example of a correct method: $25 \times 3 + 65 \times 2 + 10$, then that answer $\div 100$
18	1m	$1000 + 179$ 179×1000 $179 \div 1000$ (1000 ÷ 179)	
19	1m	$4\frac{1}{2}$ hours or equivalent	
20	2m	£156	
	Or 1m	Shows 180 Or Shows 6156	

Q	Marks	Answer	Comments
21	2m	$\frac{2}{12}$ (3/12) $\frac{4}{12}$ $\frac{5}{12}$ (6/12) $\frac{7}{12}$ $\frac{8}{12}$ (9/12) $\frac{10}{12}$ $\frac{11}{12}$	All three correct with none incorrect for 2m
	Or 1m	Two correct with none incorrect Or Three correct with not more than one incorrect Or All fractions other than $\frac{3}{12}$, $\frac{6}{12}$, $\frac{9}{12}$ circled (question misread)	
22	1m	10000 million	Do not accept 10000000000 or 10 billion
23	1m	8	
24	2m	$\frac{19}{25}$	For 2m do not accept equivalent fractions or decimals
	Or 1m	Shows 0.76 or equivalent	Example for 1m: $\frac{38}{50}$
25	1m	240°	