

**National Numeracy Tests**

**PROCEDURAL**

**8EP15MS**

# **Markscheme**



128933



**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 2015* on the Learning Wales website and in *Welsh National Tests Data Collection and reporting arrangements 2014/15* available on the Welsh Government website.
- Markers should record their initials on the cover of the test booklet to assist quality assurance.

## 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  $86 \times 67$  and the learner records  $96 \times 67$  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  $86 \times 67$  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, for example if  $86 \times 60$  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.

## 8EP15 Procedural test: Markscheme

Q	Marks	Answer	Comments															
1	1m	4																
2	1m	7 books																
3	1m	£9																
4	1m	09:30	Accept 9:30 Also accept (0)9:30am but not (0)9:30pm															
5	1m	All three correct, i.e. <table border="1" data-bbox="371 817 683 1137"> <thead> <tr> <th></th> <th><math>&gt; \frac{1}{2}</math></th> <th><math>&lt; \frac{1}{2}</math></th> </tr> </thead> <tbody> <tr> <td>3</td> <td>✓</td> <td></td> </tr> <tr> <td>0.09</td> <td></td> <td>✓</td> </tr> <tr> <td><math>\frac{2}{3}</math></td> <td>✓</td> <td></td> </tr> <tr> <td>0.28</td> <td></td> <td>✓</td> </tr> </tbody> </table>		$> \frac{1}{2}$	$< \frac{1}{2}$	3	✓		0.09		✓	$\frac{2}{3}$	✓		0.28		✓	
	$> \frac{1}{2}$	$< \frac{1}{2}$																
3	✓																	
0.09		✓																
$\frac{2}{3}$	✓																	
0.28		✓																
6	1m	700 metres																
7	1m	154																
8	1m	0.01 or equivalent																

Q	Marks	Answer	Comments
9i	1m	8 hours	
9ii	1m	£56, £336	Both correct for the mark
10	1m	13	
11	2m	£0.72 or 72p	For 2m, correct units must be given
	Or 1m	Shows 0.72 or 72 with no units or incorrect units Or Incorrect answer, but shows a method that would lead to £0.72 or 72p if calculated correctly, with not more than one numerical error	Example of a correct method: $1.80 \div 5 \times 2$
12	1m	3.75	
13	1m	£33	
14	1m	0.01 or equivalent	
15	1m	778 000	
16	1m	465350	Accept 464350 or 466350 Do not accept the final zero omitted
17	1m	27cm <sup>3</sup>	
18i	1m	1 : 2	
18ii	1m	1 : 0.5, or equivalent value for 0.5	
19	2m	100	
	Or 1m	Shows the value 125	
20	1m	$\frac{2}{5}$ $\frac{2}{5}$ $\frac{11}{20}$ $\frac{7}{10}$	

Q	Marks	Answer	Comments
21i	1m	54.5°F to 56°F inclusive	
21ii	1m	13.5°C to 14.5°C inclusive	
22	1m	$\frac{5}{2}$ or equivalent	Example for 1m: $2\frac{1}{2}$
23	2m	12cm <sup>2</sup>	
	Or 1m	Incorrect answer, but shows a method that would lead to 12cm <sup>2</sup> if calculated correctly, with not more than one numerical error	
24	1m	16% 40% 42% (60%) 75%	
25i	1m	Positive	Accept unambiguous misspellings Ignore additional words, e.g. strong
25ii	1m	26 to 27 inclusive	
26	2m	3.405 litres or 3.41 litres	
	Or 1m	Shows the value 3.4 or 3.40 Or Shows 2.27 + 1.135 Or Incorrect answer, but shows a method that would lead to 3.405 litres or 3.41 litres if calculated correctly, with not more than one numerical error	
27	2m	$2\frac{1}{4}$ or equivalent	
	Or 1m	Shows the value 45 Or Incorrect answer, but shows a method that would lead to $2\frac{1}{4}$ if calculated correctly, with not more than one numerical error	



