Ma

KEY STAGE
2

LEVEL
6

2014

Mathematics tests

Mathematics mark schemes

Paper 1 and paper 2

National curriculum assessments

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Introduction

The Standards and Testing Agency (STA) is responsible for the development and delivery of statutory tests and assessments. The STA is an executive agency of the Department for Education (DfE).

This booklet contains the mark schemes for the assessment of level 6 mathematics. Level threshold tables will be available at www.education.gov.uk/ks2 from Tuesday 8 July, 2014.

The level 6 mathematics test is made up of two papers and contains a total of 50 marks.

> **Paper 1:** non-calculator paper (26 marks)
> **Paper 2:** calculator paper (24 marks)

There is no mental mathematics paper in the level 6 test.

As in previous years, external markers will mark the key stage 2 national curriculum tests. The mark schemes are made available to teachers after the tests have been taken.

The mark schemes were written and developed alongside the questions. Children's responses from trialling have been added as examples to the mark schemes to ensure they reflect how children respond to the questions. The mark schemes indicate the criteria on which judgements should be made. In applying these principles, markers use professional judgement based on the training they have received.

A number of questions in both papers contain elements of using and applying mathematics. These are not referenced explicitly in the mark scheme.

The mathematics test mark schemes

The marking information for each question is set out in the form of tables, which start on page 10 of this booklet.

The '**Question**' column on the left-hand side of each table provides a quick reference to the question number and the question part.

The '**Requirement**' column may include two types of information:

- a statement of the requirements for the award of each mark, with an indication of whether credit can be given for correct working; and

- examples of some different types of correct response.

The '**Mark**' column indicates the total number of marks available for each question part.
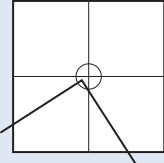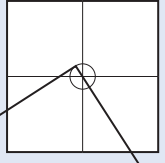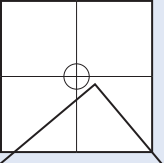
The '**Additional guidance**' column indicates alternative acceptable responses, and provides details of specific types of response that are unacceptable. Other guidance, such as the range of acceptable answers, is provided as necessary. The '!' is used to indicate responses that are not presented conventionally but are awarded one or more marks in recognition of children's mathematical understanding at this age.

Applying the mark schemes

To ensure consistency of marking, the most frequent queries about applying the mark schemes are listed on pages 4 and 5 along with the action the marker will take. This is followed by further guidance on pages 6 and 7 relating to the marking of questions that involve money, time and other measures. Specific guidance on marking responses involving coordinates, probability and algebra is given on pages 8 and 9. Unless otherwise specified in the mark schemes, markers will apply these guidelines in all cases.

General guidance in marking the level 6 mathematics tests

What if…	Marking procedure	
The child's response is numerically or algebraically equivalent to the answer in the mark scheme.	Markers will award the mark unless the mark scheme states otherwise.	
The child's response does not match closely any of the examples given.	Markers will use their judgement in deciding whether the response corresponds with the statement of the requirements given in the 'Requirement' column. Reference will also be made to the 'Additional guidance' column and, if there is still uncertainty, markers will contact the supervising marker.	
The child has responded in a non-standard way.	Calculations, formulae and written responses do not have to be set out in any particular format. Children may provide evidence in any form as long as its meaning can be understood. Diagrams, symbols or words are acceptable for explanations or for indicating a response. Any correct method of setting out working, however idiosyncratic, will be accepted.	
There appears to be a misreading affecting the working.	This is when the child misreads the information given in the question and uses different information without altering the original intention or difficulty level of the question. For each misread that occurs, one mark only will be deducted.	
No answer is given in the expected place, but the correct answer is given elsewhere.	Where a child has shown understanding of the question, the mark(s) will be given. In particular, where a word or number response is expected, a child may meet the requirement by annotating a graph or labelling a diagram elsewhere in the question.	
The child's answer is correct, but the wrong working is shown.	A correct response will always be marked as correct.	
The response in the answer box is wrong, but the correct answer is shown in the working.	Where appropriate, detailed guidance will be given in the mark schemes, which markers will follow. If no guidance is given, markers will examine each case to decide whether:	
	• the incorrect answer is due to a transcription error	If so, the mark **will** be awarded.
	• the child has continued to give redundant extra working which does not contradict work already done	If so, the mark **will** be awarded.
	• the child has continued to give redundant extra working which does contradict work already done.	If so, the mark **will not** be awarded.

What if…	Marking procedure
The correct response has been crossed out and not replaced.	Any legible crossed-out work that has not been replaced will be marked according to the mark scheme. If the work is replaced, then crossed-out work will not be considered.
More than one answer is given.	If all answers are correct (or a range of answers is given, all of which are correct), the mark will be awarded unless prohibited by the mark scheme. If both correct and incorrect responses are given, no mark will be awarded.
The answer is correct but, in a later part of the question, the child has contradicted this response.	A mark given for one part will not be disallowed for working or answers given in a different part, unless the mark scheme specifically states otherwise.
The child has drawn lines which do not meet at the correct point.	Markers will interpret the phrase 'slight inaccuracies in drawing' to mean 'within or on a circle of radius 2mm with its centre at the correct point'. within the circle accepted on the circle accepted outside the circle **not** accepted

Recording marks awarded

Marking will take place on screen with markers viewing scanned images of children's scripts. Marks should be input on screen in accordance with the guidance given on the use of the on-screen marking software.

For multiple-mark questions, markers will record the award of 3, 2, 1 or 0 as appropriate, according to the mark-scheme criteria. There will be provision in the software to record questions not attempted (N/A: not attempted).

The software will aggregate mark totals automatically.

Further details on recording marks and the use of the on-screen system will be given at marker training.

Marking specific types of question: summary of additional guidance

Responses involving money

	Accept	Do not accept
Where the £ sign is given for example: £3.20, £7 £	£3.20 £7 £7.00 Any unambiguous indication of the correct amount, eg: £3.20p £3 20 pence £3 20 £3,20 £3-20 £3:20	Incorrect placement of pounds or pence, eg: £320 £320p Incorrect placement of decimal point or incorrect use or omission of 0, eg: £3.2 £3 200 £32 0 £3-2-0
Where the p sign is given for example: 40p p	40p Any unambiguous indication of the correct amount, eg: £0.40p	Incorrect or ambiguous use of pounds or pence, eg: 0.40p £40p

Where no sign is given
 	
for example: £3.20, 40p
	£3.20 40p
	320p £0.40
	Any unambiguous indication of the correct amount, eg:
	£3.20p £0.40p
	£3 20 pence £.40p
	£3 20 £.40
	£3,20 40
	£3-20 0.40
	£3:20
	  3.20
	  320
	3 pounds 20
		Incorrect or ambiguous use of pounds or pence, eg:
		£320 £40
		£320p £40p
		£3.2 0.4
		  3.20p 0.40p

Responses involving time

	Accept	Do not accept
A time interval for example: 2 hours 30 minutes	2 hours 30 minutes Any unambiguous, correct indication, eg: $2\frac{1}{2}$ hours 2.5 hours 2h 30 2h 30 min 2 30 150 minutes 150 Digital electronic time, ie: 2:30	Incorrect or ambiguous time interval, eg: 2.30 2-30 2,30 230 2.3 2.3 hours 2.3h 2h 3 2.30 min
A specific time for example: 8:40am, 17:20	8:40am 8:40 twenty to nine Any unambiguous, correct indication, eg: 08.40 8.40 0840 8 40 8-40 8,40 Unambiguous change to 12- or 24-hour clock, eg: 17:20 as 5:20pm or 17:20pm	Incorrect time, eg: 8.4am 8.40pm Incorrect placement of separators, spaces etc or incorrect use or omission of 0, eg: 840 8:4:0 8.4 084

Responses involving measures

	Accept	Do not accept
Where units are given (eg: kg, m, l) for example: 8.6kg ⬚ kg	8.6kg Any unambiguous indication of the correct measurement, eg: 8.60kg 8.6000kg 8kg 600g	Incorrect or ambiguous use of units, eg: 8600kg

Responses involving coordinates

	Accept	Do not accept
Responses involving coordinates for example: (5, 7)	Unconventional notation, eg: (05, 07) (five, seven) $\overset{x\quad y}{(5,\ 7)}$ ($x = 5, y = 7$)	Incorrect or ambiguous notation, eg: (7, 5) $\overset{y\quad x}{(7,\ 5)}$ (5x, 7y) ($5^x, 7^y$) ($x - 5, y - 7$)

Responses involving probability

	Accept	Do not accept

A numerical probability should be expressed as a decimal, fraction or percentage only
 	
for example:
 	
0.7 $\frac{7}{10}$ 70%
	Equivalent decimals, fractions and percentages, eg:
	
	0.7000
	
	$\frac{70}{100}$
	
	$\frac{35}{50}$
	
	70.0%
	
	A probability correctly expressed in one acceptable form, which is then incorrectly converted or incorrectly expressed, but is less than one and greater than zero, eg:
	
	$\frac{70}{100} = \frac{18}{25}$
	
	$\frac{70}{100} = 7\%$
	
	$\frac{70}{100}$ is 7:10
		The following categories should not be credited if given as the final answer to a question. However, in a multiple-mark question, sight of these can be awarded partial credit in an otherwise correct method.
		
		! Probability that is incorrectly expressed, eg:
		    7 in 10
		    7 over 10
		    7 out of 10
		    7 from 10
		
		! Fraction with non-integers in the numerator and/or denominator.
		
		! Probability expressed as a percentage without a percentage sign.
		
		! Probability expressed as a ratio, eg:
		    7 : 10, 7 : 3, 7 to 10
		
		In a multiple-part question, do not award the mark for the *first* occurrence of each category if unaccompanied by an acceptable response; award the mark for subsequent occurrences.

Responses involving algebra

	Accept	Do not accept
Responses involving algebra for example: $2 + n$ $n + 2$ $2n$ $\dfrac{n}{2}$ n^2	Unambiguous use of a different case or variable, eg: N used for n x used for n	**!**　Unconventional notation, eg: 　　$n \times 2$, or $2 \times n$, or $n2$, or $n + n$ for $2n$ 　　$n \times n$ for n^2 　　$n \div 2$, for $\dfrac{n}{2}$ or $\dfrac{1}{2}n$ 　　$2 + 1n$ for $2 + n$ 　　$2 + 0n$ for 2 Within a question that demands simplification, do not accept unconventional notation as part of a final answer involving algebra. Accept within a method when awarding partial credit, or within an explanation or general working. **✗**　Embedded values given when solving equations (since this provides insufficient indication that the child recognises the answer within the equation), eg: 　　in solving $3x + 2 = 32$, 　　$3 \times 10 + 2 = 32$ for $x = 10$ To avoid penalising the two types of error below more than once within each question, do not award the mark for the *first* occurrence of each type within each question. Where a question carries more than one mark, only the final mark should be withheld.
	Words used to precede or follow equations or expressions, eg: $t = n + 2$ tiles, or tiles $= t = n + 2$ for $t = n + 2$	**!**　Words or units used within equations or expressions, eg: 　　n tiles $+ 2$ 　　n cm $+ 2$ 　　Do not accept the above on its own. Ignore if accompanying an acceptable response.
	Unambiguous letters used to indicate expressions, eg: $t = n + 2$ for $n + 2$	**✗**　Ambiguous letters used to indicate expressions, eg: 　　$n = n + 2$ for $n + 2$

Note

If a child leaves the answer box empty but writes the answer elsewhere on the page, then that answer must be consistent with the units given in the answer box and the conditions listed in the general guidance section (pages 4–9).

If a child changes the unit given in the answer box, then their answer must be equivalent to the correct answer using the unit they have chosen, unless otherwise indicated in the mark scheme.

Paper 1: Calculator **not** allowed

Question	Requirement	Mark	Additional guidance
1a	4	**1m**	**!** *Algebra* See guidance (page 9)
1b	0	**1m**	
2	6.8	**2m**	✓ *Accept equivalent fractions and decimals,* eg: • $6\frac{4}{5}$ • $\frac{34}{5}$
		or	

	Shows or implies a complete, correct method, eg:
	• $5d = 3 \times 10 + 4$
	  $5d = 34$
	    $d = 34 \div 5$
	• $3 \times 10 = 40$ *(error)*
	  $40 + 4 = 44$
	  $44 \div 5 = 8.4$ *(error)*
	• $30 + 4 = 34$
	  $34 \div 5$
		1m	✗ *Incorrect methods*, eg:
			where the perimeter of the pentagon is treated as being 4cm *less* than the perimeter of the triangle:
			• $30 - 4 = 26$
			  $26 \div 5 = 5.2$

Paper 1: Calculator **not** allowed

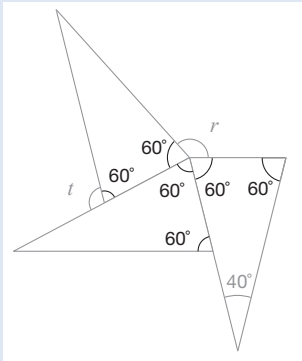| Question	Requirement	Mark	Additional guidance
3a	3	**1m**	
3b	Gives an explanation that justifies why the range cannot be 2, eg: • The difference between the smallest and the largest would be 2 but here it is 3 even before you put any number in • It must be at least 3 because 4 – 1 = 3 • The range is already 3 • The range is at least the difference between 1 and 4. So the range is more than 2	**1m**	✓ *Minimally acceptable explanation* **(1)** Includes the following: range **or** 4 – 1 **or** highest – lowest *and* is 3 **or** greater than 2, eg: • The range is 3 • 4 – 1 = 3 **OR** **(2)** Shows one of the given numbers as the smallest / largest number *and* shows how the number at either end of the range should change to make range 2, eg: • The highest would need to be 3, but 4 is the highest • The lowest would need to be 2, but 1 is the lowest • Because the highest is 4, the lowest would need to be 2 ✗ *Incomplete or ambiguous explanation,* eg: • It must be bigger than 2 • Lowest is 1, highest 4 • Range is difference between highest and lowest • The range is already too great between 1 and 4 ! *Condone responses that assume 1 is always the lowest possible number, provided the remainder of the explanation is correct* ! *Condone creditworthy explanations that indicate the blank card is the child's value from part (a)*

Paper 1: Calculator **not** allowed

Question	Requirement	Mark	Additional guidance
4a	Gives a correct interpretation of the graph, eg: • It is a straight line • It goes up steadily • The angle of the line stays the same • The gradient of the line is constant	**1m**	✓ *Minimally acceptable explanation,* eg: • It is straight • It doesn't bend • It is a diagonal ✗ *Incomplete or ambiguous explanations* that do not sufficiently imply a constant speed and / or do not demonstrate the relationship holds for the entire graph, eg: • The line goes straight up • It is not wobbly • It is level • Every 5 mins he walks the same distance • He walks 1km in the first 15 mins and 1km in the second 15 mins ! *Values read from graph* Accept, provided it is clear the relationship holds for the entire graph. Values should be accurate within +/– 0.1km and / or +/– 2 minutes, eg: • 0.7km every 10 minutes • Every 7.5 minutes he walks about half a km ! *Calculation of kilometres per hour* Accept values in the range 3.7 to 4.3km per hour inclusive.
4b	08:10	**1m**	! *Accept values between 08:09 and 08:11 inclusive* ! *Time* See guidance (page 7)

Paper 1: Calculator **not** allowed

Question	Requirement	Mark	Additional guidance
5a	15	**1m**	
5b	40	**2m**	✓ *For 2m, correct follow-through answer from their answer to part (a) as* (4 × 'their a' − 20)
		or	
		1m	✓ *For 1m, correct follow-through from their answer to part (a) as* (3 × 'their a') seen *(total number of black counters)*
	45 seen *(total number of black counters)*		
	OR		**OR**
	60 seen *(total number of counters)*		(4 × 'their a') seen *(total number of counters)*
	OR		
	Shows or implies a complete, correct method, eg:		

	• 0.75 of 20 = 15 (white)
	  20 − 15 = 5 (black)
	  15 × 4 = 50 *(error)*
	  50 − 15 = 35 (black)
	  35 − 5		

	• $\frac{3}{4}$ of 20 is 15 15 × 4 − 20		
	• 15 × 4 − 20		

6	All four pairs of prime numbers listed, ie:
	
	• 5 and 31
	  7 and 29
	  13 and 23
	  17 and 19
		2m	✓ *For 2m, accept all prime numbers listed in pair order,* ie:
			• 5, 31, 7, 29, 13, 23, 17, 19

		or	
	Three or four correct pairs of prime numbers listed and not more than one incorrect pair of numbers	**1m**	✓ *For 1m, all eight prime numbers listed, and no other numbers, without any indication of how the numbers are paired,* eg: • 5, 7, 13, 17, 19, 23, 29, 31

Paper 1: Calculator **not** allowed

Question	Requirement	Mark	Additional guidance
7	$r = 150$ **and** $t = 110$	**2m**	✓ *Values must be unambiguously associated with the correct letter for the award of 2m or 1m*
		or	

	r **or** t correct
	
	 OR
	
	 Shows or implies a complete, correct method for both angles, eg:
	
	 • $40 + 50 + 50 = 180$ *(error)*
	  $360 - 50 - 50 - 50 = 210$
	  $180 - 50 = 130$
		1m	! *Answers for r and t transposed*
			 If r is 110 and t is 150, then award 1m
			
			 ! *Follow-through from incorrect base angle seen on the diagram*
			 Award 1m if both r and t correctly follow through from an incorrect angle seen at base of an isosceles triangle, eg:
			
			 $r = 360 - 180 = 180$
			 $t = 180 - 60 = 120$

8a	Gives a pair of numbers to make the calculation correct, eg: • $\dfrac{1}{\boxed{2}} + \dfrac{\boxed{1}}{5}$ • $\dfrac{1}{\boxed{10}} + \dfrac{\boxed{3}}{5}$	**1m**	✓ **Accept the following** • $\dfrac{1}{\boxed{-10}} + \dfrac{\boxed{4}}{5}$ • $\dfrac{1}{\boxed{-2}} + \dfrac{\boxed{6}}{5}$ ✗ *Use of non-integers,* eg: • $\dfrac{1}{\boxed{3.33...}} + \dfrac{\boxed{2}}{5}$
8b	Gives a **different** pair of numbers to make the calculation correct	**1m**	
9	8 faces and 12 edges	**1m**	
10	2.5	**1m**	✓ *Equivalent fractions or decimals*
11	12	**2m**	
		or	
	Shows or implies a complete correct method, eg: • $4 \times 6 \div 2 = 13$ *(error)* • $60 - (10 \times 6 \div 2) - (6 \times 6 \div 2)$ • $60 - 48$	**1m**	

Paper 1: Calculator **not** allowed

Question	Requirement	Mark	Additional guidance
12	216	**3m**	
		or	
	54 seen *(angle for mushroom soup)*	**2m**	
	OR		
	Shows or implies a correct method for tomato soup with not more than one computational error, eg:		

	• 360 − 90 = 240 *(error)*
	  240 ÷ 5 = 48
	  48 × 4 = 192		

	• 0.6 × 360		

	• 25% = chicken
	  75% ÷ 5 = 15%
	  15% of 360° = 54°
	  54° × 4		

		or	
	Shows the angle representing tomato soup and mushroom soup is 270	**1m**	✗ *Tomato soup is 270°*
	OR		✗ *Methods involving drawings of pie charts, without any values given*
	60% or $\frac{3}{5}$ seen *(as evidence of a correct method for tomato soup)*		✓ *Accept equivalent fractions or decimals*, eg:
	OR		• $\frac{6}{10}$
	Shows or implies a correct method for finding the angle required to represent mushroom soup, eg:		• 0.6
	• 360° − 90° = 260° *(error)* 260° ÷ 5 = 40° *(error)*		✗ *Do not accept 60 or 60° for 60%*
	OR		
	Shows or implies a correct method for tomato soup with more than one computational error, eg:		
	• 360° − 90° = 240° *(error)* 240° × 4 ÷ 5 = 200° *(error)*		
13a	P is (−12, −30)	**1m**	! *Coordinates* See guidance (page 8)
			✓ *Unambiguous answers written on the diagram*
13b	Q is (38, −30)	**1m**	! *Answers for* **P** *and* **Q** *transposed* Award 1 mark for Q only, ie:
			• P is (38, −30) Q is (−12, −30)
			! *Answer for* **Q** *correctly follows through from an incorrect answer for* **P** Award 1m for Q for follow-through from P as ('their *x*' + 50, 'their *y*')

Paper 2: Calculator allowed

Question	Requirement	Mark	Additional guidance
1a	$n + 3$ **or** $3 + n$	1m	! ***Algebra*** See guidance (page 9) ! ***Alternative letter used,*** eg, for part (a), accept m used instead of n, if the expression is otherwise correct: • $m + 3$

1b	$2m - 5$	1m	! ***Condone unsimplified or unconventional algebra,*** eg, for part (b):
			  • $m + m - 5$
			  • $m2 - 5$

2a	Draws an arrow pointing to 12	1m	✓ ***Unambiguous indication of 12,*** eg:
			  • an arrow drawn within 2mm of the mark for 12
			  • 12 circled

2b	Draws a cross on 7	1m	✓ ***Unambiguous indication of 7,*** eg:
			  • a cross drawn within 2mm of the mark for 7
			  • 7 circled

3a	178	1m	
3b	5	1m	
4	75 and 48 in either order ***or*** Gives one correct value	2m ***or*** 1m	! ***Ratios given in each box,*** ie: 48 : 60 and 60 : 75 Condone, for 2m or 1m
5a	Gives an answer in the range 1.8 to 2.2 inclusive	1m	✓ ***Accept correct values given in hours and minutes,*** ie: Accept answers in the range 1 hour 48 minutes to 2 hours 12 minutes inclusive
5b	Gives an answer in the range 0.35 to 0.45 inclusive	1m	! ***Time*** See guidance (page 7)

Paper 2: Calculator allowed

Question	Requirement	Mark	Additional guidance
6a	5.50	**2m**	! *Money* See guidance (page 6) ✗ *For 2m and 1m, do not accept misreads of numbers given as words,* eg: • four instead of five
		or	
	22 seen **OR** Shows or implies a complete, correct method, eg: • c = £4.50 + £3.50 × 5 = £4.50 + £17.50 = £21 *(error)* £21 ÷ 4	**1m**	! *For 1m, accept answers with incorrect or ambiguous units as evidence of a correct method,* eg: • £550 • £550p • £5.5 ! *Correct embedded solutions* For 1m, condone a response which shows £5.50 embedded irrespective of how it is obtained ✗ *Incomplete methods,* eg: • 3.50 × 5 = 17.50 • 14.50 ÷ 4 = 3.63
6b	3	**1m**	
7a	36	**1m**	✗ *Equivalent fractions or decimals*
7b	46	**1m**	✗ *Equivalent fractions or decimals*
8	Gives a correct explanation that converts the given fractions to decimals **or** fractions with a common denominator / numerator **or** percentages, eg: • $\frac{4}{7} = \frac{36}{63}$ but $\frac{5}{9} = \frac{35}{63}$ • 0.57142… > 0.55555 • Because there is a $\frac{1}{63}$ difference between the two	**1m**	✓ *For $\frac{4}{7}$ accept:* • 0.57(...) **or** 57(. ...%) ✓ *For $\frac{5}{9}$ accept:* • 0.56 **or** 0.55(...) **or** 56(%) **or** 55(. ...%) ✓ *Minimally acceptable explanations,* eg: • $\frac{36}{63}$ $\frac{35}{63}$ • 0.56 0.57 ✗ *Incomplete explanations* that fail to convert both fractions to a common format, eg: • $\frac{4}{7}$ is 0.57 so it is bigger • 9ths are smaller than 7ths and there is only one more 9th than 7th so $\frac{4}{7}$ is greater ! *Condone method of conversion incorrectly expressed in an otherwise correct explanation,* eg: • $\frac{4}{7} \times 9 = \frac{36}{63}$

Paper 2: Calculator allowed

Question	Requirement	Mark	Additional guidance
9	Gives two numbers which differ by 1, the lower of which is in the range 2.5 to 2.5823 **exclusive**, eg: • 2.55 and 3.55 Gives at least one number in the range 2.5 to 2.5823 exclusive **or** 3.5 to 3.5823 exclusive	**2m** *or* **1m**	✓ *Numbers may be given in either order*

10	32
	
	160 seen *(the total children in the school)*
	
	OR
	
	Shows or implies a complete, correct method, eg:
	
	• 35 + 45 = 90 *(error)*
	  100 − 90 = 10
	  56 ÷ 35 = 1.6
	  1.6 × 10 = 16
	
	• 35% of children = 56
	  total children = 56 × 100 ÷ 35 = 150 *(error)*
	  Reception = 100 − (45 + 35)% = 20%
	  Reception = 20% of 150
	  0.2 × 150 = 40 *(error)*
	
	• 35% is 56
	  5% is 8
	  20% is 4 × 8 = 24 *(error)*
		2m
		
		or
		
		1m
			✗ *Do not accept 160° or 160%*

Paper 2: Calculator allowed

Question	Requirement	Mark	Additional guidance
11	25.7	**2m**	**!** *Measures* See guidance (page 7) ✓ *Equivalent fractions or decimals,* eg: • $25\frac{7}{10}$ ✓ *Accept 25 or 26 (an answer that has been rounded or truncated)* ✓ *For 2m, use of π other than 3 or 3.14 (the given approximation),* ie: • 25.71 • 25.7(...) • 25.5 • $10 + 5\pi$ • $25\frac{5}{7}$
		or	
	15.7 seen *(half the perimeter of the circle, without the straight edge added)* **OR** Shows or implies a complete, correct method, eg: • $\frac{1}{2}(3.14 \times 10) + 10$	**1m**	✓ *For 1m, use of π other than 3 or 3.14 (the given approximation),* ie: • 15.71 • 15.7(...) • 15.5 • 5π • $15\frac{5}{7}$
12	11 **OR** 12 **OR** any value between 11.5 and 11.6 inclusive	**2m**	
		or	
	Any value between 277 and 288 inclusive seen *(value takes account of seconds in a minute and minutes in an hour)* **OR** Any value between 694 and 695 inclusive seen *(value takes account of hours in a day and either seconds in a minute or minutes in an hour)* **OR** Shows or implies a complete, correct method, eg: • $1\,000\,000 \div 60 \div 60 \div 24$ • $1\,000\,000 \div 86\,400$ • $16\,666 \div 60 \div 24$	**1m**	✗ *Place value errors in the value taken for one million in an otherwise correct method,* eg: • $100\,000 \div 60 \div 60 \div 24$