Ma

KEY STAGE
2

LEVEL
6

2012

Mathematics tests

Mark schemes

Paper 1 and Paper 2

National Curriculum assessments

Marking the Level 6 mathematics tests

The Standards and Testing Agency (STA) is responsible for the development and delivery of statutory tests and assessments in 2012. The STA is an executive agency of the Department for Education (DfE). The test papers will be marked by external markers employed by the external marking agency under contract to the STA.

This booklet contains the mark schemes for the level 6 mathematics Paper 1 and Paper 2. Level threshold table will be available at www.education.gov.uk/ks2 from 10 July 2012.

General guidance

The structure of the 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 '**Mark**' column indicates the total number of marks available for each question part. On some occasions the symbol (U1) may be shown in the 'Mark' column. The 'U' indicates that there is a *Using and applying mathematics* element in the question. The number, 1, shows the number of marks attributed to using and applying mathematics in this question.

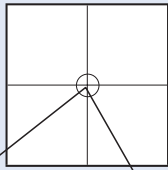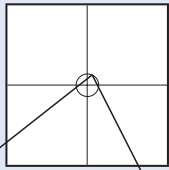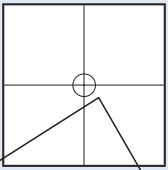The '**Requirement**' column may include two types of information:

- a statement of the requirements for the award of each mark, with an indication of whether credit can be given for correct working
- examples of some different types of correct response.

The '**Additional guidance**' column indicates alternative acceptable responses, and provides details of specific types of response which are unacceptable. Other guidance, such as the range of acceptable answers, is provided as necessary.

Applying the mark schemes

In order to ensure consistency of marking, the most frequent procedural queries 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 scheme, markers will apply the following guidelines in all cases.

2012 KS2 Level 6 mathematics tests mark schemes

What if…	Marking procedure	
The pupil's response is numerically equivalent to the answer in the mark scheme.	Markers will award the mark unless the mark scheme states otherwise.	
The pupil'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 and, if there is still uncertainty, markers will contact the supervising marker.	
The pupil has responded in a non-standard way.	Calculations, formulae and written responses do not have to be set out in any particular format. Pupils 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 pupil 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 pupil has shown understanding of the question, the mark(s) will be given. In particular, where a word or number response is expected, a pupil may meet the requirement by annotating a graph or labelling a diagram elsewhere in the question.	
The pupil'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 scheme, 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 ■ the pupil has continued to give redundant extra working which does not contradict work already done ■ the pupil has continued to give redundant extra working which does contradict work already done.	If so, the mark **will** be awarded. If so, the mark **will** be awarded. 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 pupil 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 pupil 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 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 pupil scripts. Marks should be input on screen in accordance with the guidance given on the use of the on-screen marking software.

For multiple marked 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 (NR: no response). The software will aggregate mark totals automatically.

Further details on recording of marks and the use of the online 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

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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

Note

If a pupil 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 above.

If a pupil 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.

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Responses involving coordinates

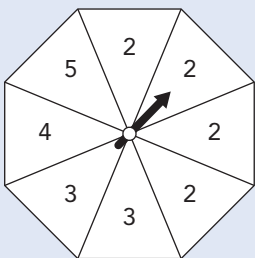|	Accept	Do not accept
For example: *(5, 7)*	Unconventional notation, eg (05, 07) (five, seven) x y (5, 7) ($x = 5$, $y = 7$)	Incorrect or ambiguous notation, eg (7, 5) y x (7, 5) (5x, 7y) (5^x, 7^y) ($x - 5$, $y - 7$)

Responses involving probability

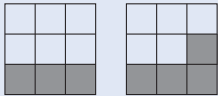|	Accept	Condone! Do not accept ✗
A numerical probability should be expressed as a decimal, fraction or percentage only. *For example:* 0.7 $\frac{7}{10}$ 70%	Equivalent decimals, fractions and percentages, eg 0.700 $\frac{70}{100}$ $\frac{35}{50}$ 70.0% 70.0% A probability correctly expressed in one acceptable form, which is then incorrectly converted but is still less than 1 and greater than 0, eg $\frac{70}{100} = \frac{18}{25}$	The first **four** categories of error below should be ignored if accompanied by an acceptable response, but should not be accepted on their own. However, to avoid penalising the first **three** types of error below more than once within each question, do not award the mark for the *first* occurrence of each type of error unaccompanied by an acceptable response. Where a question part carries more than one mark, only the final mark should be withheld. **!** A probability that is incorrectly expressed, eg 7 in 10 7 over 10 7 out of 10 7 from 10 **!** A fraction with other than integers in the numerator and/or denominator. **✗** A probability expressed as a percentage without a percentage sign. **✗** A probability expressed as a ratio, eg 7:10, 7:3, 7 to 10 **✗** A probability greater than 1 or less than 0

Responses involving algebra

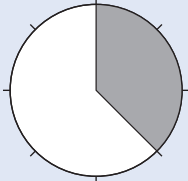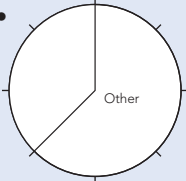|	Accept	Condone! Do not accept ✗
For example: $2 + n$ $n + 2$ $2n$ $\dfrac{n}{2}$ n^2	Unambiguous use of a different case or variable, eg N used for n x used for n	**!** Unconventional notation, eg: $n \times 2$ or $2 \times n$, or $n2$ or $n + n$ for $2n$ $n \times n$ for n^2 $n \div 2$ for $\dfrac{n}{2}$ or $\dfrac{1}{2}n$ $2 + 1n$ for $2 + n$ $2 + 0n$ for 2 Within a question that demands simplification, do not accept 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, 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 on their 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 $n + 2$

2012 KS2 Level 6 mathematics tests mark schemes

Paper 1 - Calculator not allowed

Question	Requirement	Mark	Additional guidance
1		−1		4		9		14		19		1m	
2	Fulfills all four of the conditions: • No 1s • Four 2s • More 3s than 4s • The same number of 4s and 5s eg: • 2 2 2 2 3 3 4 5 **OR** • 2 2 2 2 3 3 3 3 **OR** • 2 2 2 2 3 7 8 9 **OR** • 2 2 2 2 3 3 3 9 Gives a combination of numbers that fulfils three of the four conditions above	2m *or* 1m	× *Do not allow, for 2m or 1m, anything other than eight numbers given,* eg one section left blank
3	25 %	1m	× *Equivalent fractions or decimals*

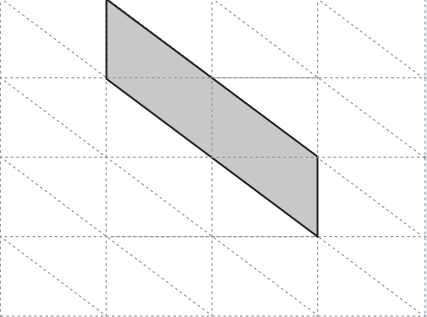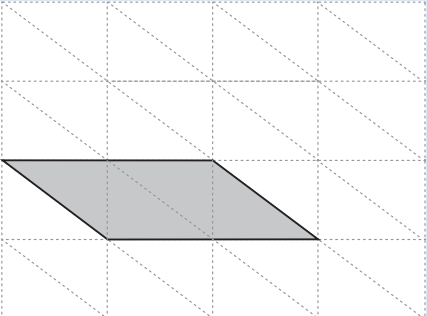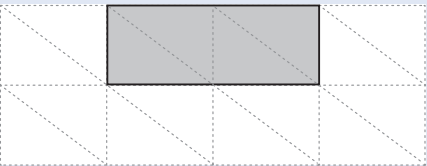| Question	Requirement	Mark	Additional guidance

4	5 cm
	
	Answer of 2.5
	
	OR
	
	Shows understanding of a correct method even if there are computational errors, eg
	
	• 90 ÷ 3 = 36 *(error)*
	  12 ÷ 2 = 6
	  36 ÷ 6 = 6
		2m
		(U1)
		
		or
		
		1m	

5	Gives a correct explanation with a number x such that $50 \leq x < 55$, or $-5 < x < 5$, as an example, eg: • 53 to the nearest hundred is 100, and to the nearest ten is 50 and 2 × 50 = 100 • If it's 50 or more but less than 55 it will round to 100 (nearest hundred) and 50 (nearest ten) and 100 is double 50 • 0 is 0 to the nearest 100 and 0 to the nearest 10 and twice 0 is 0	**1m** (U1)	✓ *Minimally acceptable explanation,* eg: • 51 rounds to 50 and 100 • 54 ➡ 50 and 54 ➡ 100 • 50 rounds to 100 • 0 rounds to 0 ✗ *Incomplete or incorrect explanation,* eg: • They used 51 • 50 x 2 = 100 • They could use between 50 and 55, which round to 100

6	103
	
	Shows a complete correct method with not more than one computational error, eg:
	
	• 152 + 197 = 339 *(error)*
	  339 – 246 = 93
	• 349 – 246 = 97 *(error)*
	• 152 + 197 = 349
	  349 – 246
		2m
		
		or
		
		1m	
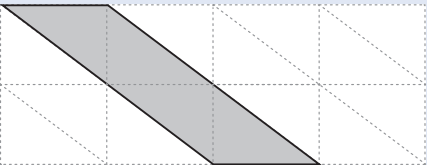
Question	Requirement	Mark	Additional guidance
7a	Indicates **Yes** and gives a correct explanation, eg: • $\frac{1}{3} = \frac{3}{9}, \frac{3}{9} < \frac{4}{9}$ • • $\frac{1}{3}$ of 9 is 3 not 4 • $\frac{4}{9}$ should be $\frac{1.333...}{3}$, not $\frac{1}{3}$ • 0.33... < 0.44... • $\frac{1}{3} = \frac{4}{12}, \frac{4}{12} < \frac{4}{9}$ • $\frac{1}{3}$ of 27 = 9 and $\frac{4}{9}$ of 27 = 12	1m U1	✓ *Minimally acceptable explanation,* eg: • $\frac{3}{9}$ • $\frac{9}{27}, \frac{12}{27}$ • 4 is over a third of 9 • $\frac{1}{3}$ of 9 is 3 • $\frac{4}{9}$ is closer to a half than a third • 0.33, 0.44 • It is one ninth bigger • If you divide $\frac{4}{9}$ by a $\frac{1}{3}$ you get $\frac{4}{3}$ • $\frac{4}{12}$! *Inaccuracies in diagrams* Throughout the question, condone provided the pupil's intention to divide into thirds, ninths and/or eighteenths is clearly shown, and the correct sections are shaded ! *Indicates No, or no decision made, but explanation clearly correct* Condone provided the explanation is more than minimal ✗ *Incomplete or incorrect explanation,* eg: • If you draw a pie chart for $\frac{4}{9}$, more than $\frac{1}{3}$ is shaded • Put them into 27ths and $\frac{4}{27} > \frac{1}{27}$ • $\frac{1}{3} \times 3 = \frac{3}{9}$

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Question	Requirement	Mark	Additional guidance

7b	Indicates **No** and gives a correct explanation, eg:
	
	• The fractions are equal; if you multiply the numerator and denominator by the same number the fractions are equivalent
	• $\frac{4}{9} = \frac{8}{18}$
	• $\frac{4}{9}$ x 2 = $\frac{8}{9}$ not $\frac{8}{18}$
	• $\frac{8}{18}$ ÷ 2 = $\frac{4}{18}$ which is $\frac{2}{9}$ not $\frac{4}{9}$
	• To double the fraction, you don't double the numerator and the denominator, you just double the numerator
	• To halve the fraction, you don't halve the denominator, only the numerator
		1m
		
		(U1)
			✓ *Minimally acceptable explanation,* eg:
			
			    • Equal
			    • Equivalent
			    • Same
			    • $\frac{4}{9}$ is half of $\frac{8}{9}$
			    • $\frac{4}{18}$ is half of $\frac{8}{18}$
			    • You only double the top number
			    • You only halve the top number
			
			! *Indicates Yes, or no decision made, but explanation clearly correct*
			Condone provided the explanation is more than minimal
			
			✗ *Incomplete explanation,* eg
			
			    • If you double the top and the bottom number of $\frac{4}{9}$, you get $\frac{8}{18}$

Question	Requirement	Mark	Additional guidance
8a	Gives both correct values, ie 700 (or 701) and 1000 (or 999) (in either order)	1m	
8b	Indicates Elementary and gives a correct explanation that places the speed clearly within the correct section on the graph, eg: • 30 words in one minute is 300 words in ten minutes • 30wpm = 900 words in 30 minutes • Darren is between 25 and 35 words per minute so she is the same as Darren	1m U1	✓ *Minimally acceptable explanation,* eg: • 300 every 10 • Point equivalent to 30 words per minute (eg 300 words in 10 minutes) clearly indicated on the graph • 25-35, same as Darren • $20 \times 30 = 600$! *Small number of minutes used, where regions are closer together* Accept points equivalent to 30 words per minute where the number of minutes is 2.5 or greater eg, accept • 30 words in one minute is 75 words in $2\frac{1}{2}$ minutes eg, do not accept • I looked at 1 minute on the graph and found where 30 words is on the graph ✗ *Incomplete explanation* eg: • I read up from 10 minutes • Between 25 and 30 words per minute • Same as Darren
9a	Gives a value for y such that $10y + 2$ is a prime number, eg: • 0 • $\frac{1}{2}$ • 1.7	1m	
9b	Gives a value for y such that $10y + 2$ is a square number, eg: • −0.1 • 0.2 • 0.7 • 1.4	1m	

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Question	Requirement	Mark	Additional guidance
10a	Gives three integers other than 2, 2, 6 (in any order) whose product is 24, eg: • 1, 1, 24 • 1, 24, 1 • 1, 2, 12 • 1, 3, 8 • 1, 4, 6 • 2, 3, 4	1m	**!** *Non-integer(s) used* As this shows understanding of volume, condone provided the three values given have a product of 24 eg, accept • 1.5, 2, 8
10b	7	1m	
11	Divides the pie chart into two correct sectors and shades/labels correctly, eg •	1m	**✓** *Unambiguous indication of shading/labelling* eg • **!** *Given key ignored* Condone incorrect shading provided their labelling is unambiguous eg, accept • **!** *Additional sectors shown* Ignore provided the sector(s) for 11 year-old girls are clearly indicated eg, accept •

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Question	Requirement	Mark	Additional guidance
12a	5 : 1	**1m**	✗ *Ratio not simplified,* eg • 15 : 3
12b	2006	**2m** U1 *or* **1m**	

	Identifies that Tom will be 18 and Ben will be 6, eg:
	
	 • 3 : 1 = 18 : 6
	 • 13 : 1
	   14 : 2 = 7 : 1
	   15 : 3 = 5 : 1
	   16 : 4 = 4 : 1
	   17 : 5
	   18 : 6		

Question	Requirement	Mark	Additional guidance
13	Shows a correct quadrilateral, eg OR Shows a quadrilateral with an area of 24cm^2 but not a perimeter of 26cm, eg OR	2m (U1) or 1m	! *Shading omitted* Accept provided the quadrilateral drawn is unambiguous ! *Lines not ruled or accurate* Accept slight inaccuracies in drawing provided the pupil's intention is clear

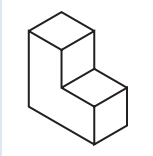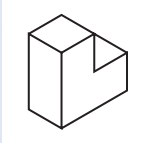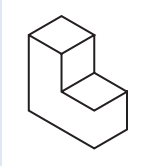| Question	Requirement	Mark	Additional guidance
14	Completes both fractions correctly, ie $2\frac{3}{5}$ $3\frac{17}{20}$ Completes one of the fractions correctly **OR** Shows both correct values, even if they are not fractions in their simplest forms, eg • $2\frac{6}{10}$ and 3.85 seen	2m *or* 1m	

2012 KS2 Level 6 mathematics tests mark schemes

Paper 2 - Calculator allowed
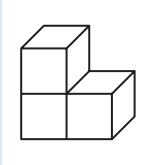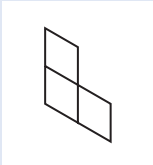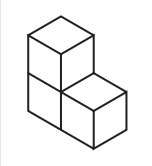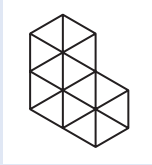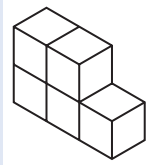
Question	Requirement	Mark	Additional guidance
1a	10 years old	1m	
1b	3 cm	1m	✓ *Answers in the range of 2.9 – 3.1 inclusive* ! *Change of unit,* eg 0.03m Condone, provided cm is replaced by m
2	2.089 in first box	1m	✓ *Equivalent fractions*
	2.095 in second box	1m	
3a	Gives a correct probability, eg: • $\frac{1}{2}$ • $\frac{3}{6}$ • 0.5 • 50% • Half	1m	! *A probability that is incorrectly expressed* Condone eg: • 3 in 6 • 3 over 6 • 3 out of 6 • 3 from 6 ✗ *A probability expressed as a percentage without a percentage sign* ✗ *A fraction with other than integers in the numerator and/or denominator* ✗ *A probability expressed as a ratio* eg: • 3:6 • 3:3 • 1 to 2 ! **Do not accept 'equal' or 'even chance' without an acceptable answer** eg, accept • equal, so half • evens, because it is 3 in 6 eg, do not accept • equal • even chance
3b	4	1m U1	

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Question	Requirement	Mark	Additional guidance
4	B	1m	✓ *Unambiguous indication*
5	13	2m	✓ *£13*
		or	
	Shows the value 9.5 or equivalent **OR** Shows a complete correct method with not more than one computational error, eg: • $\frac{123.5}{190} \times 20$ • $\frac{190}{20} = 9$ (error), $\frac{123.5}{9} \approx 14$	1m	! *13g* For 1m, accept as evidence of correct method
6	1024	1m	✓ *32^2* ! *32 × 32* Condone ✗ *32*

2012 KS2 Level 6 mathematics tests mark schemes

Question	Requirement	Mark	Additional guidance
7	Gives all three possible values for k, in any order, eg 15, 16, 17	1m	
	Gives both possible values for w, in either order, eg 6, 7	1m	

	As evidence of a correct method:
	
	Gives a completely correct response to at least one question part
	
	OR
	
	Makes not more than three errors or omissions throughout the question, eg:
	
	• For the 1st part: 15, 16, 17, 18 [*one error*]
	  For the 2nd part: 7 [*one omission*]
	• For the 1st part: 14, 15, 16 [*one error, one omission*]
	  For the 2nd part: 6, 7, 8 [*one error*]
	• For the 1st part: 15 [*two omissions*]
	  For the 2nd part: 7 [*one omission*]
	
	OR
	
	Includes non-integers within an otherwise correct response for at least one question part, eg:
	
	• For the 1st part: 15, 15.5, 16, 16.5, 17
	• For the 1st part: 14.5 < k <17.5
		1m	✗ *Ignores exclusivity of inequality,* eg:
			
			• For the 1st part: 14.5, 15, 15.5, 16, 16.5, 17, 17.5

8	6	1m (U1)	

Question	Requirement	Mark	Additional guidance
9	$b = 50$	1m	
	$a = 20$	1m	
		U1	
	As evidence of a correct method, in either part, shows or implies that the angles in one of the triangles are a, b and b eg, in the first question part • 80, 50, 50 seen • $(180 - 80) \div 2$ • $(360 - 160) \div 2 \div 2$ eg, in the second question part • $180 - 2 \times 80$ • $(360 - 160 \times 2) \div 2$ eg, correct answers transposed	1m	**!** *Incomplete or no working shown* Provided at least one correct angle is credited, award this mark **!** In the second question part 80, 80, 20 is insufficient without any indication of the position of the equal angles
10	Equation circled as shown: $b = 2a$ $a = 2b + 3c$ $a = 5c$ $\boxed{a = 6c}$ $a + b = 5$	1m	✓ *Unambiguous indication*

2012 KS2 Level 6 mathematics tests mark schemes

Question	Requirement	Mark	Additional guidance
11	Draws a correct view of the prism in any orientation, using the isometric grid, eg:	2m	✓ *Some or all internal lines drawn,* eg
			! *Lines not ruled or accurate* Accept provided the pupil's intention is clear
		or	! *Extended edges* Condone
	Draws a correct view, using the isometric grid, but the only error is either to omit one external line or to show some incorrectly indicated hidden lines, eg	1m	! *Prism enlarged* For 2m or 1m, accept provided a consistent scale factor has been used for all lengths
			! *For 2m, some or all hidden lines shown* Do not accept unless hidden lines are dotted or otherwise shown as hidden eg, do not accept
	OR Draws a view of a prism with an L-shaped cross-section, using the isometric grid with all external lines and no incorrectly indicated hidden lines shown, but with incorrect dimensions		
	OR Shows an understanding that the net forms a prism with an L-shaped cross-section, showing all external lines and no incorrectly indicated hidden lines, but does not use the isometric grid, eg		✗ *For 2m, any external line omitted*
			! *For 1m, L-shaped cross-section* The cross-section must have a line of symmetry eg, for 1m do not accept
	OR Draws a correct view of the cross-section, using the isometric grid, eg		
			! *For 1m, additional lines shown with correct cross-section* Ignore

Question	Requirement	Mark	Additional guidance
12	Completes the table for Zhang correctly with frequencies of 7 (for 9 points) and 4 (for 10 points), ie 	7
4		2m (U1)	
		or	
	Shows one of the values 109, 110, 102 or 103 **OR** Shows a correct method for Zhang that scores one more than the total for Park.	1m	! *For 1m, a total that uses less than 12 arrows for Zhang* Condone ! *For 1m, accept a follow through for their incorrect total for Park*
13	4	3m (U1)	
		or	
	Shows or implies at least two of these three steps correctly: 1. A correct method for evaluating the area of the circle in which the squaring is interpreted correctly 2. A correct method for finding 60% of a quantity 3. Division by 450 eg: • Shows the value 3.7(...) or 3.8 [*1, 2 and 3 but rounding omitted*] • Shows the value 1696.(...) or 1697 [*1 and 2*] • $\pi \times 900 \times 6 \div 10$ [*1 and 2*] • $3.142 \times 30^2 \times 60 \div 100 \div 450$ [*2 and 3*] • $3.142 \times 30^2 = 188.52$ (*error*) $188.52 \times 0.6 \div 450 = 0.25(...)$ [*2 and 3*] • $2827.(...) \div 450$ [*1 and 3*] Shows or implies one of the three steps above correctly, eg: • Shows the value 2827.(...) or 2828 [*1*] • 3.142×900 [*1*] • $\pi \times 30 \times 30$ [*1*] • 60% of 188.52 (*error*) = 113.(...) [*2*] • $3.142 \times 30 = 94.26$ (*error*) $94.26 \div 450 = 0.2(...)$ [*3*]	2m or 1m	✗ *Ambiguous implication for method* eg, 6.284 to imply 1 and 3