

Entry Level Certificate in Mathematics
R449/W2 SAM
Sample Assessment Material
Final Written Test 2

Time allowed: about 1 hour

* 7 8 0 0 7 5 4 0 1 5 *

- You can use:**
- a ruler (cm/mm)
 - a protractor
 - tracing paper
 - coins
 - counters
 - coloured pencils or pens
- Do not use:**
- a calculator



Please write clearly in black ink.

Centre number Candidate number

First name(s) _____

Last name _____

INSTRUCTIONS

- Use black ink.
- Answer **all** the questions.
- Write your answer to each question in the space provided. You can use extra paper if you need to, but you must clearly show your candidate number, the centre number and the question numbers.

INFORMATION

- The total mark for this test is **40**.
- The marks for each question are shown in brackets [].
- This document has **12** pages.

ADVICE

- Read each question carefully before you start your answer.

FOR TEACHER'S USE (Maximum mark 40)

Answer **all** the questions.

1 Ben wants to give a present to Kim.



Put these events in the correct order.

A
Give the present

B
Buy the present

C
Wrap the present

.....
1st 2nd 3rd

[1]

2 (a) Which whole number is between 6 and 8?

(a) [1]

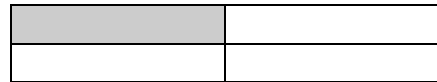
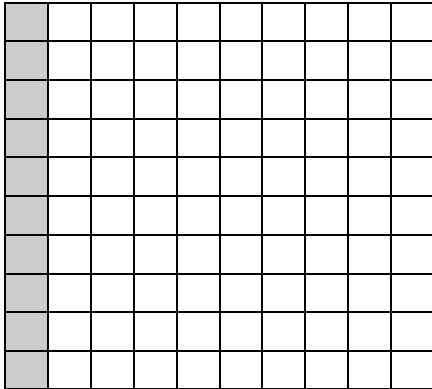
(b) Complete this sentence.

9 is one less than [1]

3 Draw lines to match the equivalent pairs below.

50%

10%



25%

$\frac{1}{2}$

[2]

4 What time is shown on the clock?



..... [1]

5 This is a recipe for rice pudding.





Rice Pudding	
For 4 people	
250 ml	milk
20 g	pudding rice
25 g	sugar


Floyd is making rice pudding for 8 people.

Show that he will need 50 g of sugar.

[2]

6 This is a pictogram of the number of cupcakes sold each day by a bakery.

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

 = 2 cupcakes

(a) Three cupcakes were sold on Friday.

Show this on the pictogram.

[2]

(b) How many cupcakes were sold in total?

(b) [4]

7 Petra wants to book a holiday.

She wants to leave on 22 August and return on 6 September.

AUGUST						
MON	TUE	WED	THU	FRI	SAT	SUN
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

(a) What day of the week is 22 August?

(a) [1]

(b) What day of the week is 6 September?

(b) [2]

8 Long rulers cost 30p and short rulers cost 10p.

(a) What is the difference in price of a long ruler compared to a short ruler?

(a)p [1]

John buys one long ruler and one short ruler with a £1 coin.



(b) Show that John should get 60p change.

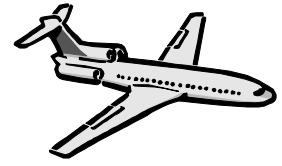
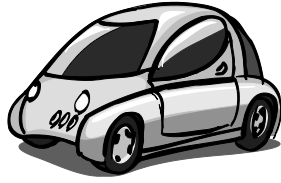
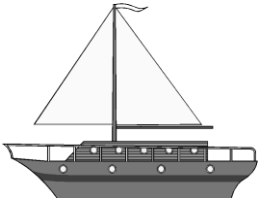
[3]

(c) John receives four coins as his change.

Which four coins make exactly 60p?

(c)p,p,p,p [2]
Coin 1 Coin 2 Coin 3 Coin 4

9 A toy box contains a boat, a car, a train and a plane.



Hazel can pick two toys to play with.

List all the different pairs of toys that Hazel can pick.

[2]

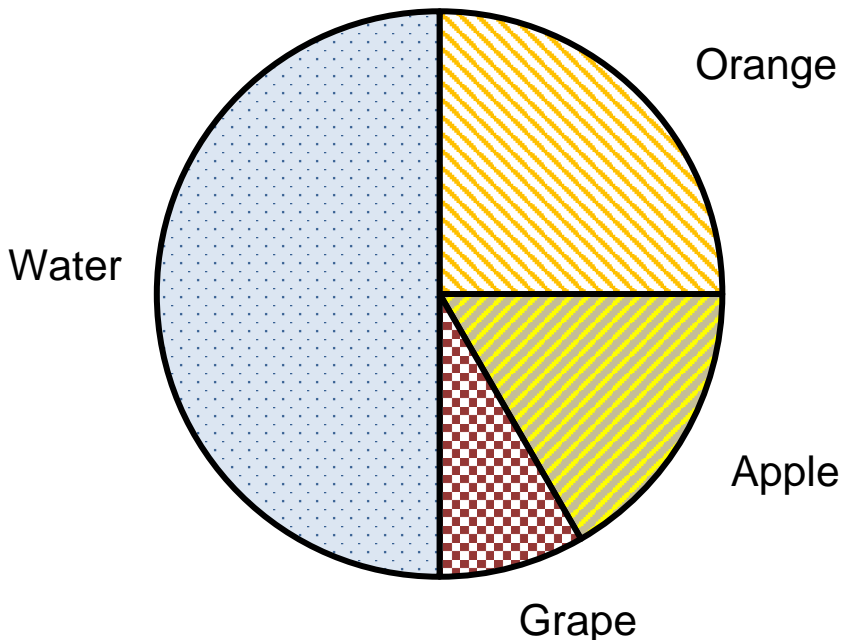
10 (a) Round 16.5 to the nearest whole number.

(a) [1]

(b) Show that 18.3×9.8 is approximately 200.

[2]

11 Jacob asked 60 students what drink they had at lunchtime.
He drew a pie chart of their answers.



(a) What was the most popular drink?

(a) [1]

(b) How many students had an Orange drink?

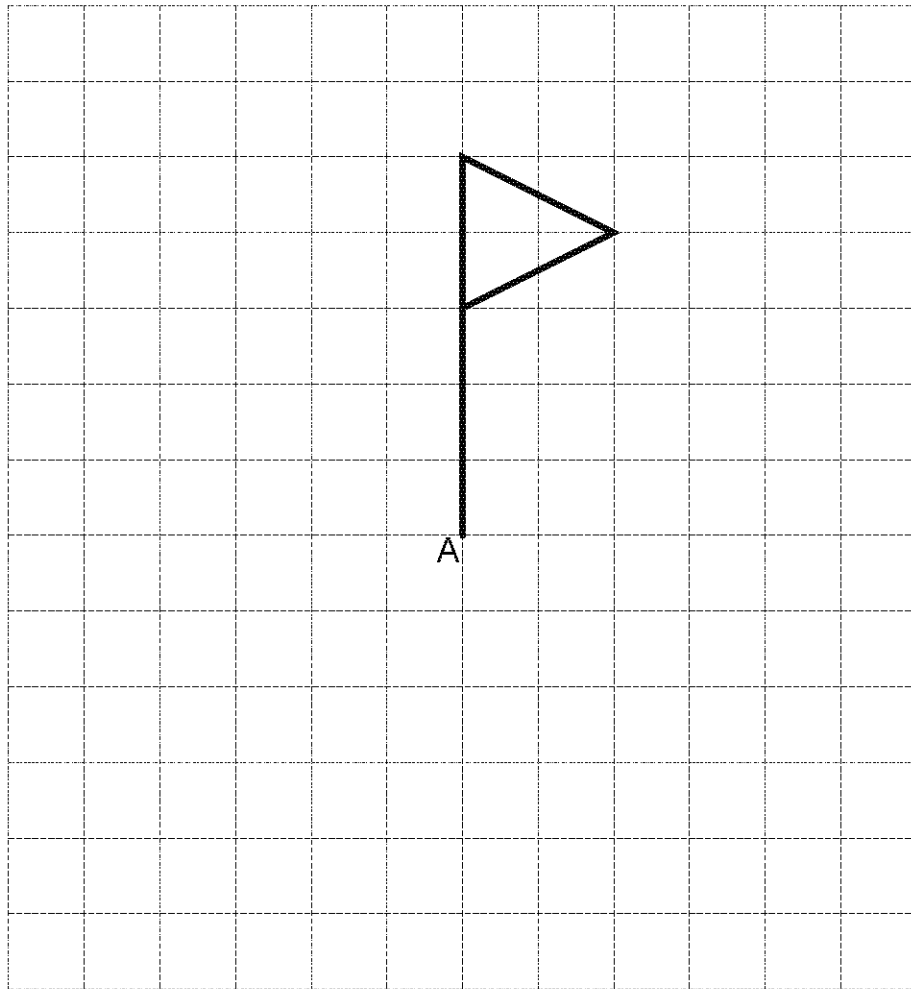
(b) [2]

12 Work out 4^2 .

..... [1]

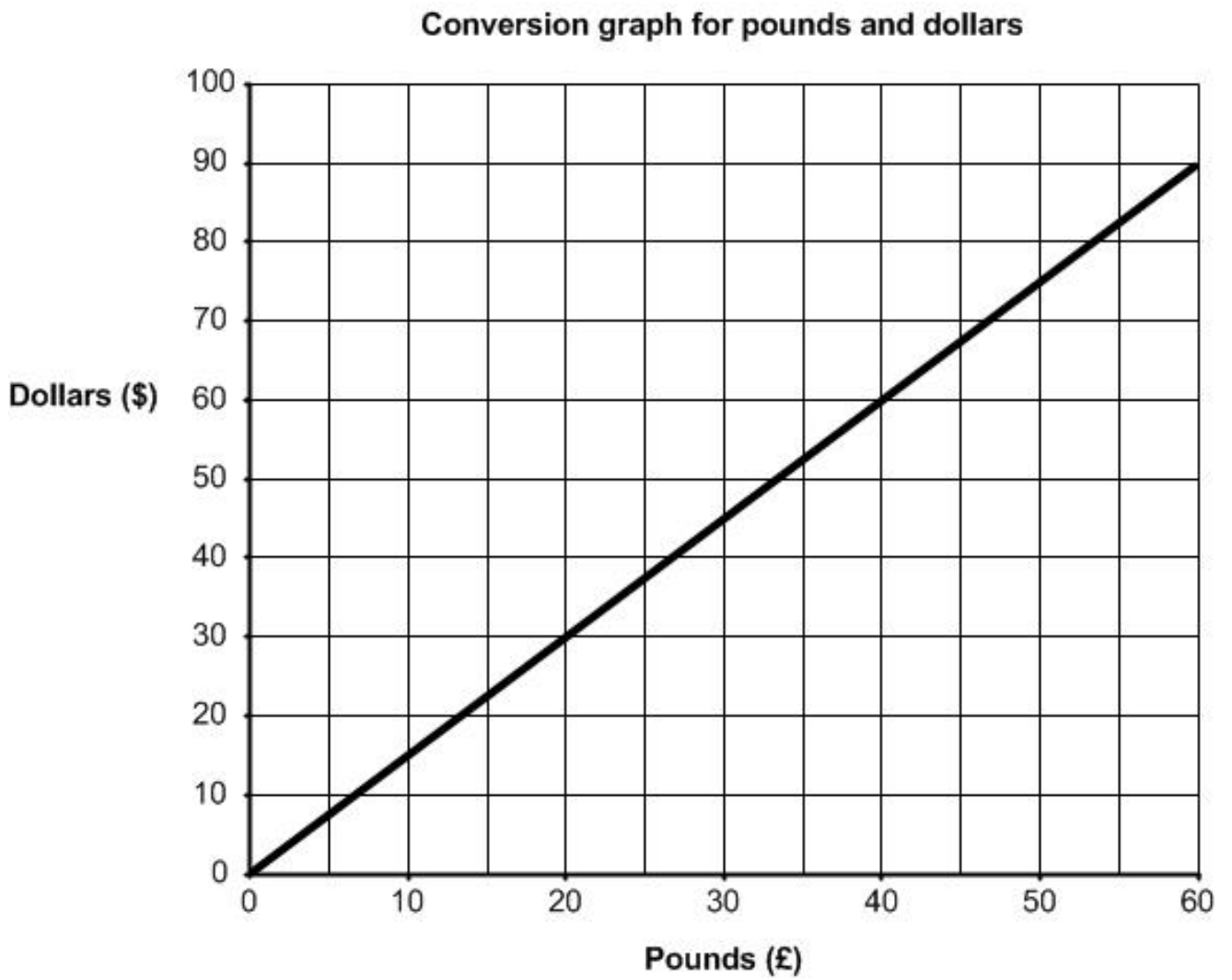
13 The grid shows a flag.

Draw the rotation of the flag by 90° clockwise around point A.



[3]

14



Use the conversion graph above to show that £100 is the same as \$150.

[3]

- 15 Michelle has drawn a scatter graph showing her friends' ages and heights in centimetres.



Use a line of best fit to predict the height of an 8 year old.

.....cm [2]

END OF QUESTION PAPER

Copyright Information:

Q8. £1 coin: © pamela_d_mcadams, iStock Photo library, www.istock.com

OCR is committed to seeking permission to reproduce all third-party content that it uses in the assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact OCR, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.



**Entry Level Certificate in Mathematics
R449/W2 SAM
Sample Assessment Material
Final Written Test 2**

SAMPLE MARK SCHEME

Duration: about 1 hour

MAXIMUM MARK 40


Instructions for marking the internally assessed written tests

1. All marking must be done in red.
2. Half marks must not be used.
3. Each mark must have a tick on the script as close as possible to the point where the mark is scored. Incorrect responses must have a cross to indicate that the answer given has been considered.
4. The total mark should be shown on the front cover.
5. The mark scheme is intended as a detailed guide to the likely responses of the candidates. Any correct response not included in the mark scheme but which answers the question to the correct level of detail should be given credit.
6. An element of professional judgment is required in the marking of any written paper. Remember that the mark scheme is designed to assist in marking incorrect solutions. Marking of the test should be positive, rewarding achievement rather than penalising failure or omissions. Incorrect spelling of mathematical words should be ignored, providing there is a clear indication of intention.
7. Samples of marked tests will be required for external validation. All test papers should be retained in secure conditions until the end of the course.

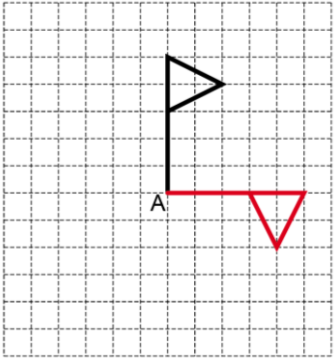
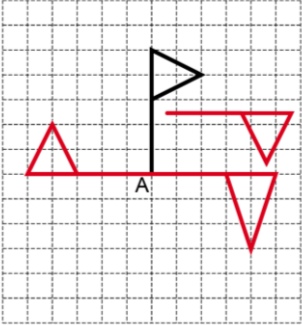
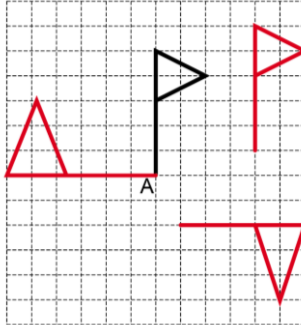
Abbreviations:	oe	or equivalent
	cao	correct answer only
	ft	follow through from their answer
	soi	seen or implied
	SC	special case

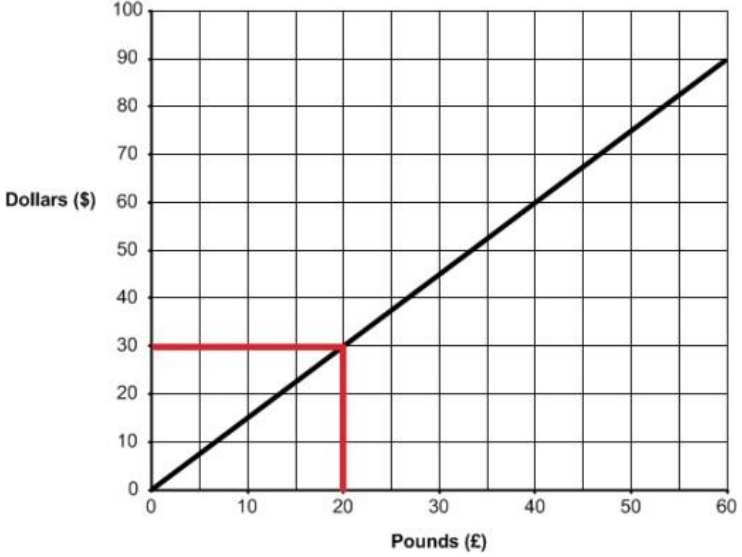
Accept words or digits throughout unless otherwise stated.

Question		Answer	Marks	Guidance
1		<p>B 1st</p> <p>C 2nd</p> <p>A 3rd</p>	1	Allow any clear abbreviations (e.g. BWG) or arrows to indicate correct order of events
2	(a)	7	1	Allow seven
	(b)	10	1	Allow ten
3			2	1 mark for 1 correct pair
4		11:15	1	Allow quarter past eleven, 23:15 oe Ignore am/pm
5		$4 \times 2 = 8$ $25 \times 2 = 50$	<p>1</p> <p>1</p>	<p>Clear indication that there is a doubling of the number of people must be shown</p> <p>Clear indication that there is a doubling of the 25 g sugar</p>

Question		Answer	Marks	Guidance
6	(a)		2	Clear evidence that candidate is attempting to represent $1\frac{1}{2}$ cupcake icons 1 mark for $\frac{1}{2}$ cupcake represents 1 cupcake
	(b)	26	4	cao 3 marks ft for their attempt at calculating total from their daily frequencies e.g. $6 + 4 + 5 + 8 + 3$ or for an answer of 23 i.e. Friday not included Or 2 marks ft for their calculated daily frequencies e.g. 6, 4, 5, 8 Or 1 mark for attempt at finding daily frequencies by doubling the number of pictogram icons e.g. 3×2 , 2×2 , 2.5×2 , 4×2
7	(a)	Tue(sday)	1	Do not penalise misspelling of Tuesday provided clear indication of intention
	(b)	Wed(nesday)	2	Do not penalise misspelling of Wednesday provided clear indication of intention 1 mark for attempt to count on from Thursday 31st August
8	(a)	20	1	cao

Question		Answer	Marks	Guidance												
	(b)	$\text{£}1 = 100\text{p}$ $30 + 10 = 40$ $100 - 40 = 60$	<p>1</p> <p>1</p> <p>1</p>	<p>Allow changing prices into $\text{£}0.30$ and $\text{£}0.10$</p> <p>Allow equivalent methods to get to given answer (i.e. recording running total of remaining money as each item bought)</p>												
	(c)	20, 20, 10, 10	2	<p>Allow any order</p> <p>1 mark for attempt to use British coins to make 60p e.g. $50 + 10$, $20 + 20 + 20$</p>												
9		<table border="1"> <tbody> <tr> <td>boat</td> <td>car</td> </tr> <tr> <td>boat</td> <td>train</td> </tr> <tr> <td>boat</td> <td>plane</td> </tr> <tr> <td>car</td> <td>train</td> </tr> <tr> <td>car</td> <td>plane</td> </tr> <tr> <td>train</td> <td>plane</td> </tr> </tbody> </table>	boat	car	boat	train	boat	plane	car	train	car	plane	train	plane	2	<p>All 6 distinct pairs given with no duplication</p> <p>1 mark for 3 correct pairs of toys</p>
boat	car															
boat	train															
boat	plane															
car	train															
car	plane															
train	plane															
10	(a)	17	1	cao												
	(b)	20×10 200	<p>1</p> <p>1</p>	<p>Allow $18.3 \times 9.8 = 179.34$ which is approximately 200</p>												
11	(a)	Water	1	Allow any clear indication of largest section on pie chart												

Question	Answer	Marks	Guidance
(b)	15	2	1 mark for $60 \div 4$ oe
12	16	1	cao
13		<p>1</p> <p>1</p> <p>1</p>	<p>Clear indication that a 90° clockwise rotation has been attempted, regardless of position or congruence</p> <p>Clear indication that the rotation has been done about point A, regardless of direction or congruence</p> <p>Object and image are congruent, regardless of position or orientation</p> <p>Examples for 2 marks</p>  <p>Examples for 1 mark</p> 

Question	Answer	Marks	Guidance
14	<p style="text-align: center;">Conversion graph for pounds and dollars</p>  <p>Find relevant conversion values from graph e.g. £20 = \$30</p> <p>Use appropriate method to multiply up from graph to required quantities e.g. $20 \times 5 = £100$</p> <p>Use same multiplying factor with dollar amount e.g. $30 \times 5 = 150$</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p>	<p>Working must be seen</p> <p>oe</p> <p>ft</p> <p>ft</p> <p>Alternate routes possible such as $30 + 30 + 30 + 30 + 30$ or $£40 = \\$60$ and $£20 = \\$30$, therefore $60 + 60 + 30 = 150$</p>

