OCR
Oxford Cambridge and RSA

Entry Level Certificate in Mathematics
R449/W2 SAM
Sample Assessment Material
Final Written Test 2
Time allowed: about 1 hour

You can use:
• a ruler (cm/mm)
• 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)

Turn over

Answer **all** the questions.

1 Ben wants to give a present to Kim.

Put these events in the correct order.

A	**B**	**C**
Give the present	**Buy** the present	**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]**
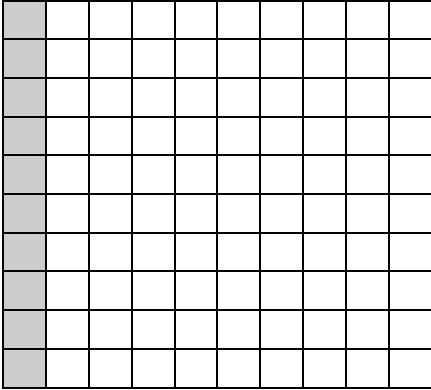
3 Draw lines to match the equivalent pairs below.

50%   10%
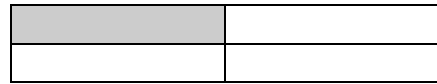
25% $\frac{1}{2}$

[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.
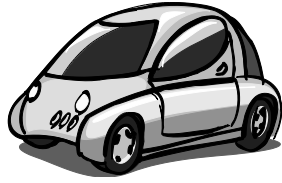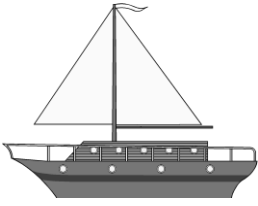
Hazel can pick two toys to play with.

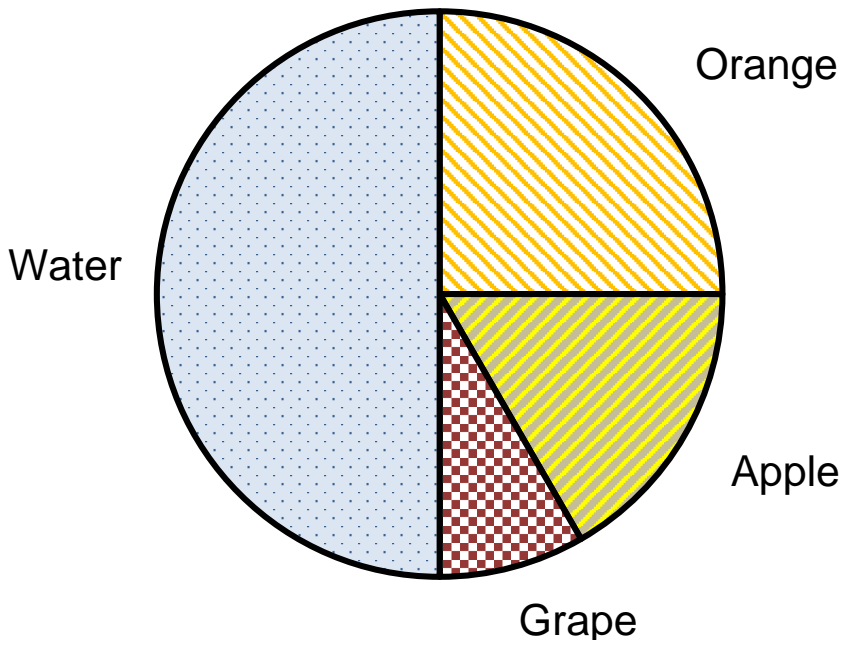List all the different pairs of toys that Hazel can pick.

[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

Conversion graph for pounds and dollars
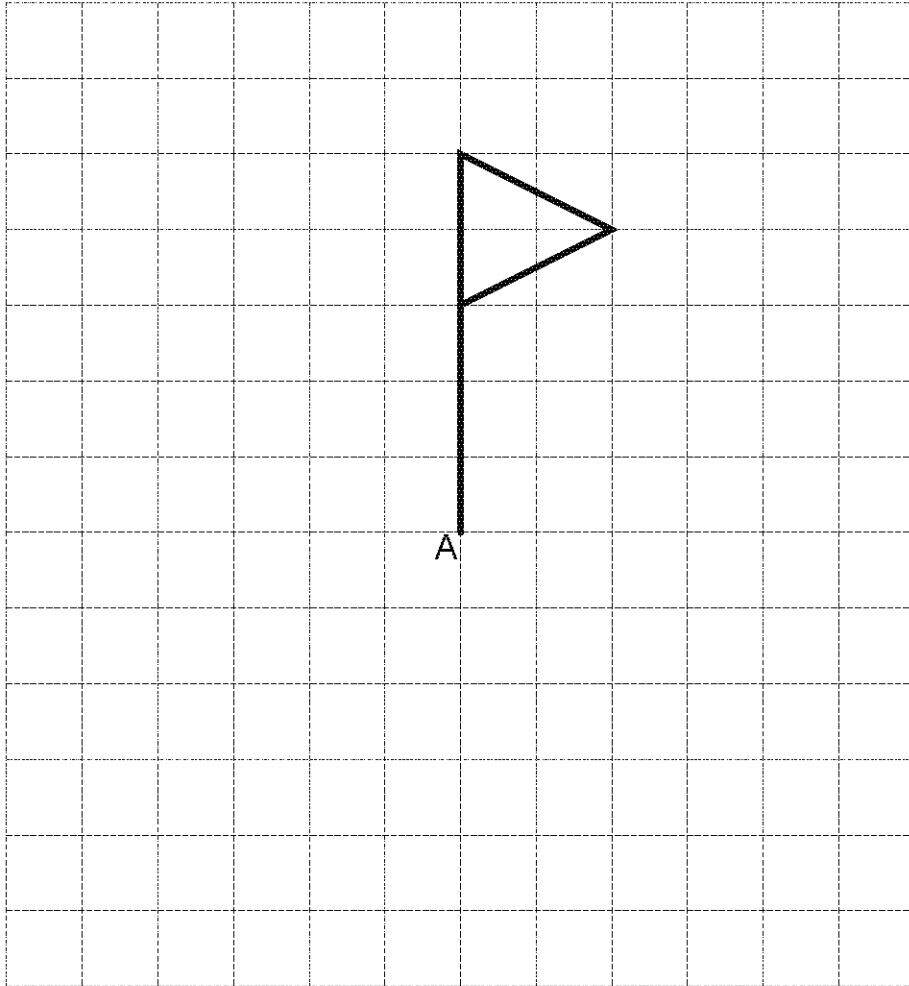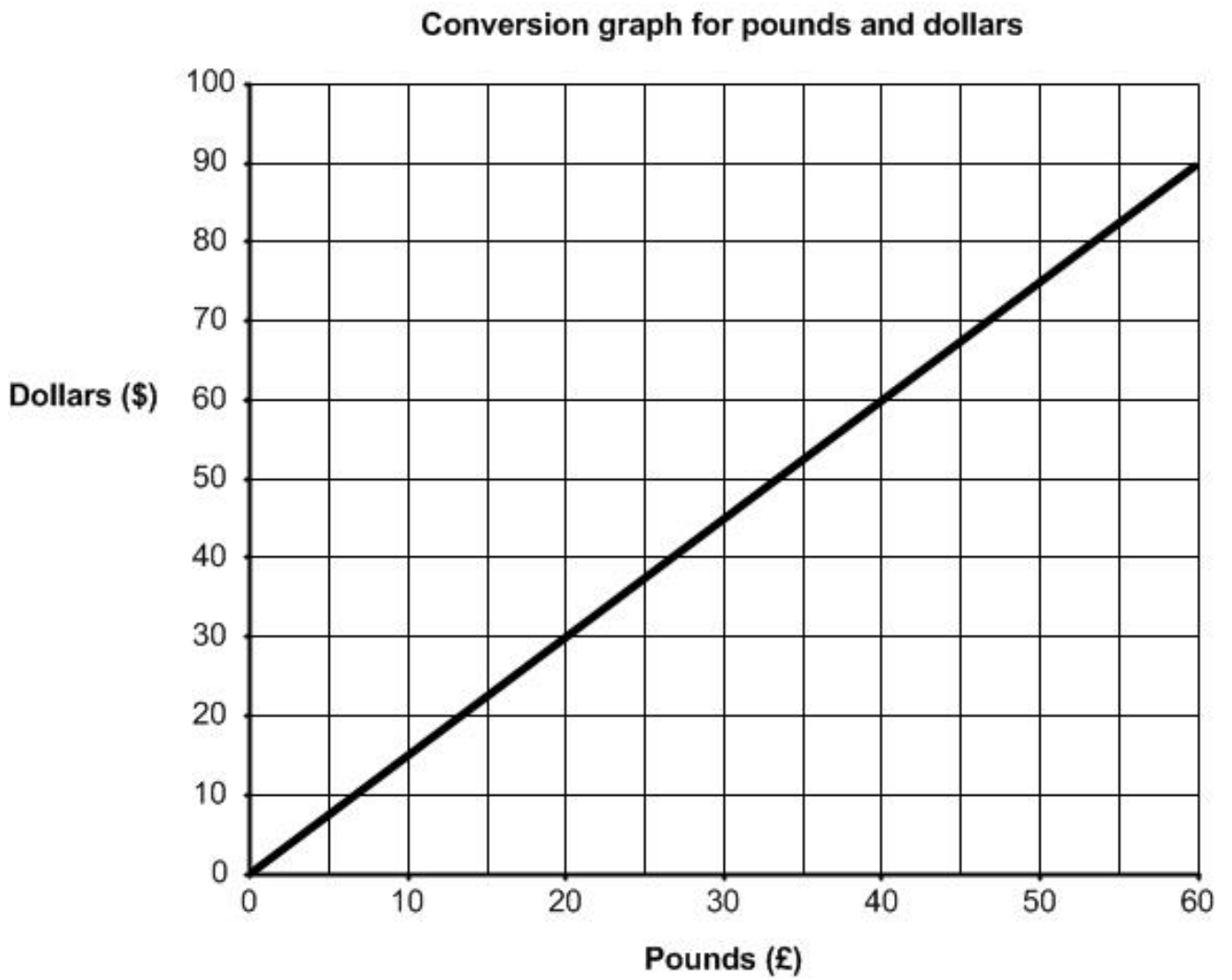
Use the conversion graph above to show that £100 is the same as $150.

[3]

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

Age plotted with height

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

…………………………cm **[2]**

END OF QUESTION PAPER

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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
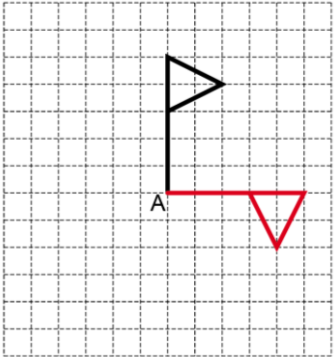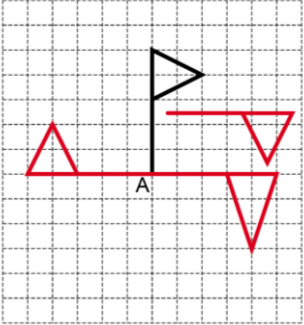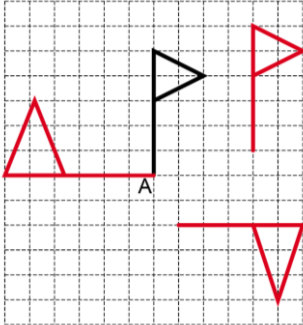
                       cao   correct answer only

                       ft   follow through from their answer

                       soi   seen or implied
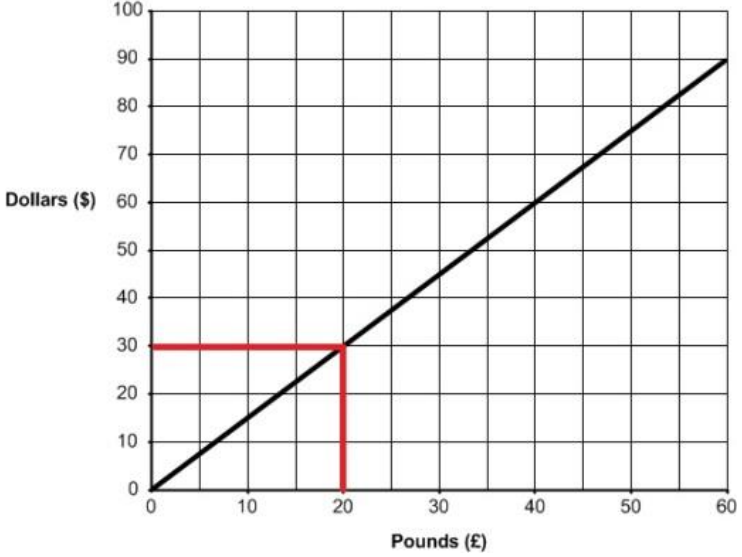
                       SC   special case
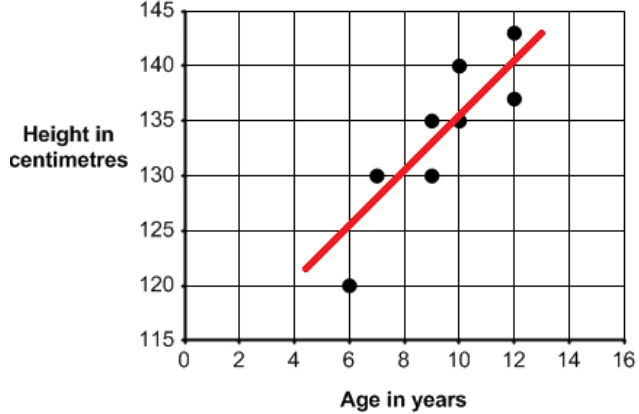
Accept words or digits throughout unless otherwise stated.

Question			Answer			Marks	Guidance
1			**B** 1st	**C** 2nd	**A** 3rd	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 × 2 = 8			1	Clear indication that there is a doubling of the number of people must be shown
			25 × 2 = 50			1	Clear indication that there is a doubling of the 25 g sugar

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)		£1 = 100p	1	Allow changing prices into £0.30 and £0.10
			30 + 10 = 40	1	Allow equivalent methods to get to given answer (i.e. recording running total of remaining money as each item bought)
			100 − 40 = 60	1	
	(c)		20, 20, 10, 10	2	Allow any order 1 mark for attempt to use British coins to make 60p e.g. 50 + 10, 20 + 20 + 20
9			<table><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></table>	2	All 6 distinct pairs given with no duplication 1 mark for 3 correct pairs of toys
10	(a)		17	1	cao
	(b)		20 × 10	1	
			200	1	Allow 18.3 × 9.8 = 179.34 which is approximately 200
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				**1**	Clear indication that a 90° clockwise rotation has been attempted, regardless of position or congruence
				1	Clear indication that the rotation has been done about point A, regardless of direction or congruence
				1	Object and image are congruent, regardless of position or orientation
					Examples for 2 marks Examples for 1 mark

Question	Answer	Marks	Guidance
14	Find relevant conversion values from graph e.g. £20 = $30	1	Working must be seen oe
	Use appropriate method to multiply up from graph to required quantities e.g. 20 × 5 = £100	1	ft
	Use same multiplying factor with dollar amount e.g. 30 × 5 = 150	1	ft Alternate routes possible such as 30 + 30 + 30 + 30 + 30 or £40 = $60 and £20 = $30, therefore 60 + 60 + 30 = 150

Question	Answer	Marks	Guidance
15	Line of best fit drawn on scatter graph Age plotted with height Height in centimetres Age in years	1	Line must be seen
	Answer given from line of best fit e.g. 130 cm	1	Result matches coordinates on line of best fit

Summary of Updates

Date	Version	Change
September 2019	2	Amends to the mark scheme and some of the images.