

Entry Level Certificate in Mathematics R449/W1SAM Sample Assessment Material Preliminary Written Test 1

Time allowed: about 1 hour

You may use:

- a ruler
- tracing paper
- a number of each type of coin
- counters
- coloured pencils/pens

Do not use:

- calculator



First name										
Last name										
Centre number										
Candidate number										

INSTRUCTIONS

- Use black ink.
- Complete the boxes above with your name, centre number and candidate number.
- Answer **all** the questions.
- Write your answer to each question in the space provided.
- Do **not** write in the bar codes.

INFORMATION

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

FOR TEACHER'S USE (Maximum mark 40)

Answer **all** the questions

1 Fill in the missing numbers.

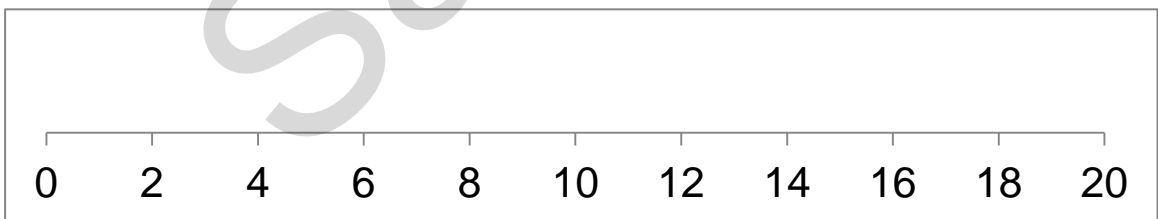
a) $7 + 2 = \square$ [1]

b) $8 - \square = 3$ [1]

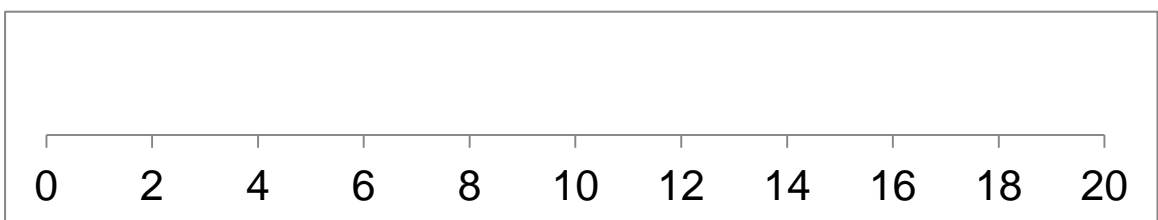
c) $9 \times 2 = \square$ [1]

2 a) Mark **17** on this scale.

[1]

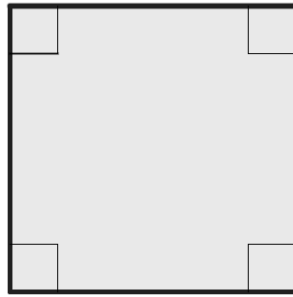
b) Mark the number **nine** on this scale.

[1]

c) Mark the Roman numeral **IV** on this scale.

[1]

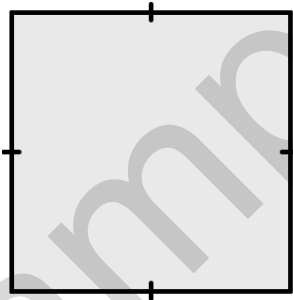
3 A square has 4 right angles.



a) Name a different shape with 4 right angles.

a) [1]

A square has 4 equal sides.



b) Name a 3 sided shape with equal sides.

..... [1]

4 Tom measures the height of 5 plants.

7 cm

2 cm

9 cm

5 cm

3 cm

a) Write these in order, largest first.

a) [2]
Largest *smallest*

b) What is the range of these heights?

b) [1]

Sarah measures the height of 5 different plants.

8 cm

8 cm

8 cm

7 cm

1 cm

c) Show that the range in height for Sarah's plants is the same as for Tom's plants.

[1]

5 Yannick asked his friends what their favourite fruit was.

a) Complete his tally chart.

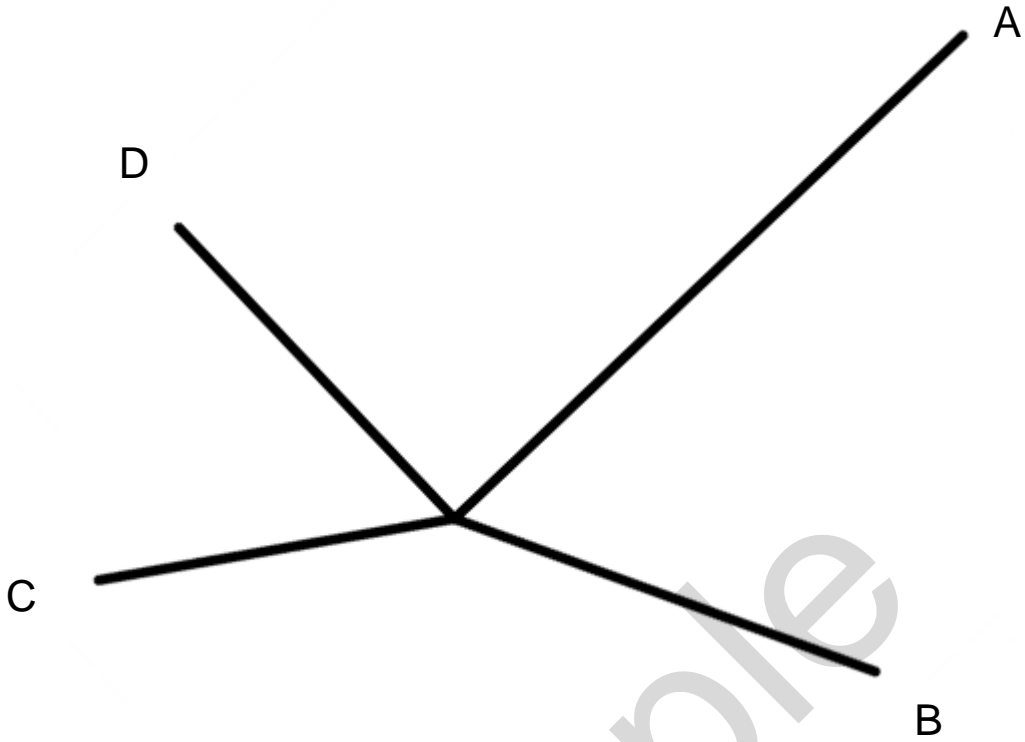
Fruit	Tally	Frequency
Apple		5
Banana	III	
Orange		6

[2]

b) How many friends did Yannick ask?

b) [2]

6 The diagram below shows 4 lines, A, B, C and D meeting at a point.



a) Mark an obtuse angle on the diagram above. [1]

b) Complete the sentence.

Line A is the line. [1]

7 Explain why **one hundred and seventy** is greater than **one hundred and seven**.

.....
.....
.....

[2]

- 8 Circle the numbers that can be divided by both 3 and 5.

35

15

40

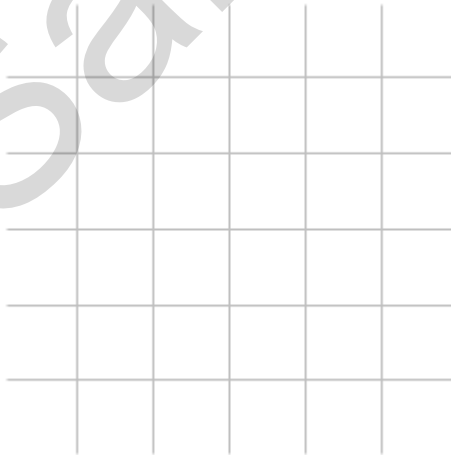
90

81

66

[2]

- 9 Draw a shape with area 8 cm^2 and perimeter 12 cm .



[3]

10 Write down the next term in the following sequences.

a) **7, 14, 21,** [1]

b) **13, 22, 31,** [2]

11 Find the missing numbers in the following sequence.

....., 11,,, 17, 19 [3]

12 Meena is facing North.

What direction will she be facing if

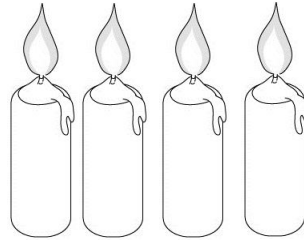
a) she makes a half turn from North?

a) [1]

b) she makes a quarter turn clockwise from North?

b) [1]

13 Chang buys 1 cake and 4 candles.



Cake
90p

Candle
12p each

a) Show that the total cost should be £1.38.

[3]

Chang has the following coins.

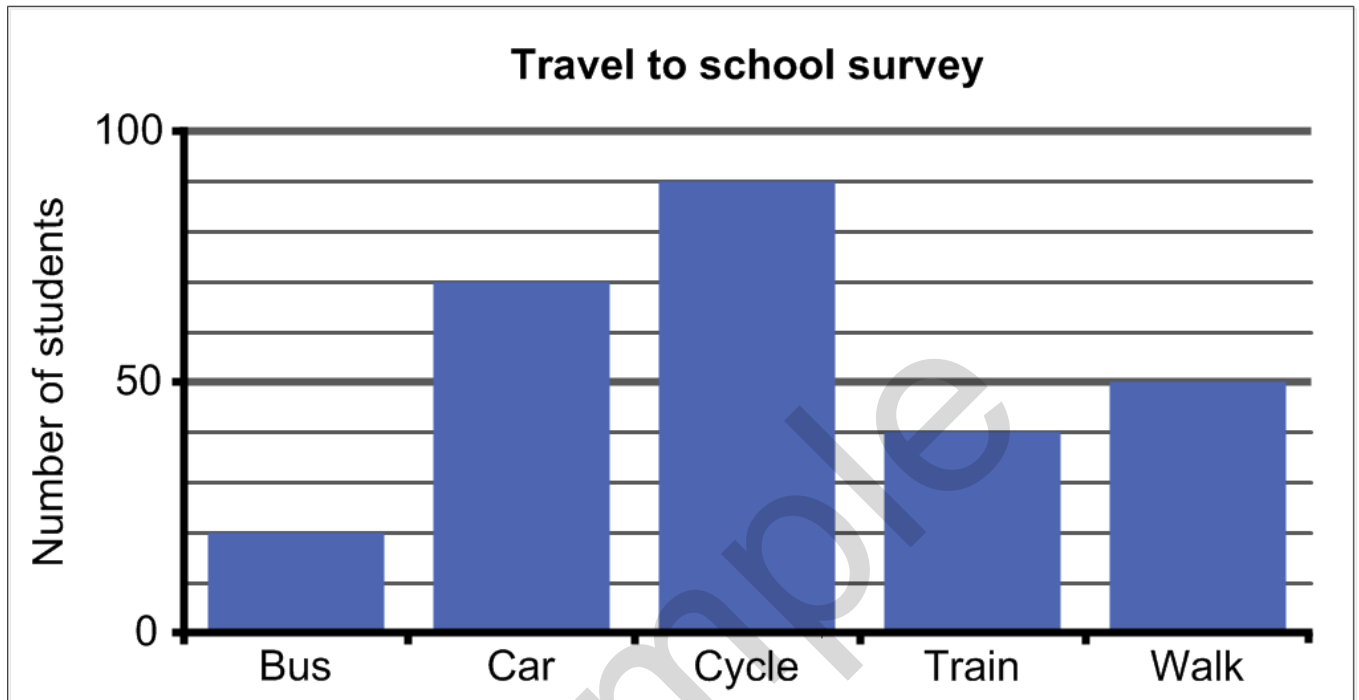
b) Circle the coins he should use to pay exactly £1.38.



[1]

14 Cai surveyed students on how they travelled to school.

The results are displayed in the bar chart below.



a) Which was the most common way to travel to school?

a) [1]

b) Show that Cai surveyed 270 students.

[2]

END OF QUESTION PAPER

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Sample

Sample

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Q13b. British coins: © pamela_d_mcadams, iStock Photo library, www.istock.com

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**Entry level Certificate in Mathematics
R449/W1SAM
Sample Assessment Material
Preliminary Written Test 1**

SAMPLE MARK SCHEME

Duration: about 1 hour

MAXIMUM MARK 40


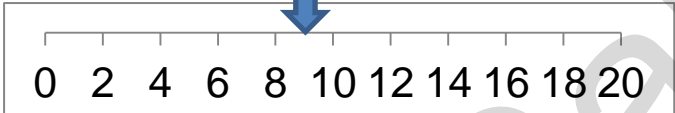
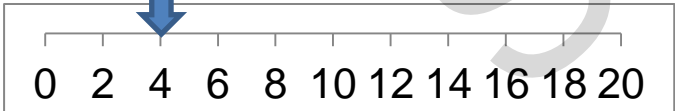
This document consists of 7 pages

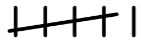
Instructions for marking the internally assessed written tests

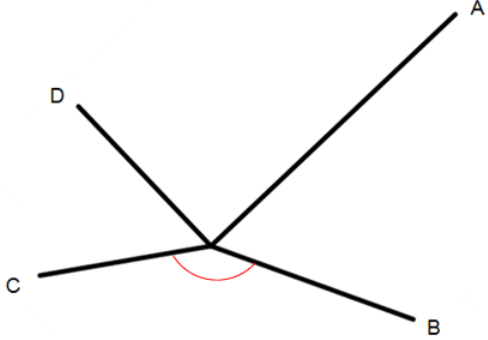
1. All marking must be done in red.
2. Half marks must not be used.
3. Each mark must have a tick on the script as close as possible to the point where the mark is scored. Incorrect responses must have a cross to indicate that the answer given has been considered.
4. The total mark should be shown on 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.

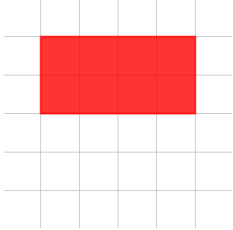

Abbreviations:	oe	or equivalent
	cao	correct answer only
	ft	follow through from their answer
	soi	seen or implied
	SC	special case

Accept words or digits throughout unless otherwise stated.

Question		Answer	Marks	Guidance
1	(a)	9	1	cao
	(b)	5	1	cao
	(c)	18	1	cao
2	(a)		1	Approximately halfway between 16 and 18
	(b)		1	Approximately halfway between 8 and 10
	(c)		1	Any clear indication of 4 on the number line
3	(a)	Rectangle	1	Do not penalise misspelling provided that intention is clear

Question		Answer	Marks	Guidance
	(b)	Equilateral triangle	1	Do not penalise misspelling provided that intention is clear
4	(a)	9, 7, 5, 3, 2	2	1 mark for starting with 9 or finishing with 2 1 mark for all numbers in order Award 1 mark only if all numbers in numeric order from smallest to largest
	(b)	7	1	cao
	(c)	$8 - 1 = 9 - 2$	1	oe
5	(a)	8	1	cao
			1	Tally gate must be used
	(b)	$5 + 8 + 6$	1	soi
		$= 19$	1	ft their frequencies in 5 a.

Question		Answer	Marks	Guidance
6	(a)		1	<p>Allow any clear indication of correct angle</p> <p>Allow alternative angles if diagram distorted in reproduction</p>
	(b)	Longest	1	Do not accept biggest. Do not penalise misspelling provided clear indication that correct word used
7		Both numbers have one lot of hundreds but 170 has seven tens which is more than 107 which has zero tens	2	<p>1 mark for identifying hundreds place value the same.</p> <p>1 mark for comparison of tens column</p> <p>Award 1 mark only if points indicated on a sketched number line</p>
8		15 and 90 only circled	2	1 mark for either 15 or 90 identified regardless of any other values mistakenly picked

Question		Answer	Marks	Guidance
9		1 by 8, 2 by 4	1	soi attempt at finding a shape with area of 8 cm^2
		1 by 5, 2 by 4, 3 by 3	1	soi attempt at finding a shape with perimeter of 12 cm
			1	Shape drawn with correct area and perimeter Allow any shape with 8 squares shaded if diagram is distorted in reproduction 
10	(a)	28	1	cao
	(b)	+9	1	soi
		40	1	cao
11		$19 - 17 = 2$	1	oe soi attempt to find sequence rule
		9	1	cao
		13, 15	1	Both values required for the final mark

Question		Answer	Marks	Guidance
12	(a)	South (S)	1	Do not penalise for misspelling provided clear intent given
	(b)	East (E)	1	Do not penalise for misspelling provided clear intent given
13	(a)	$90 + \dots\dots$ 4×12 $= 138p = \text{£}1.38$	1 1 1	Evidence of adding together values Evidence of finding four lots of 12p Conversion between £ and pence seen
	(b)	£1, 20p, 10p, 5p, 2p, 1p	1	Allow any clear identification of correct coins (i.e. list, circling, ticks, etc.)
14	(a)	Cycle	1	Allow any clear indication of the tallest bar on the bar chart
	(b)	$20 + 70 + 90 + 40 + 50$	1 1	Clearly show attempt at determining the frequencies from the bar chart Clearly show that the sum of items has been found by adding together the total number of people