

Entry Level Certificate in Mathematics
R449/W1 SAM
Sample Assessment Material
Preliminary Written Test 1

Time allowed: about 1 hour

You can use:

- a ruler (cm/mm)
- a protractor
- tracing paper
- coins
- counters
- coloured pencils or pens

Do not use:

- a calculator



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

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.

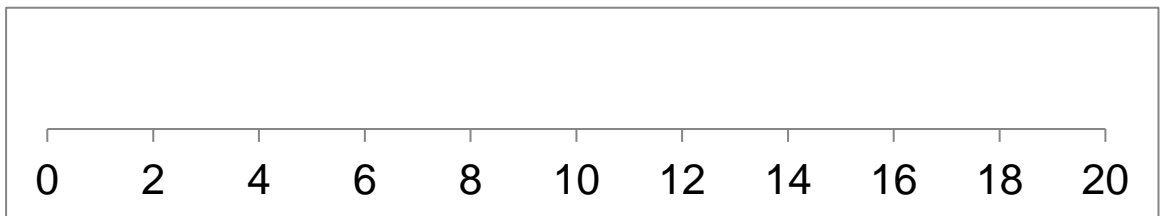
1 Fill in the missing numbers.

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

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

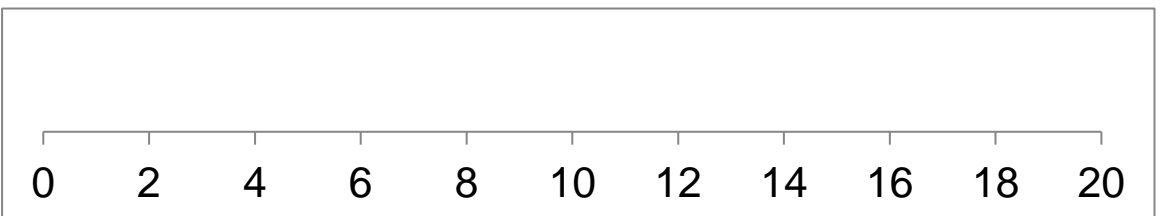
(c) $9 \times 2 = \square$ [1]

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



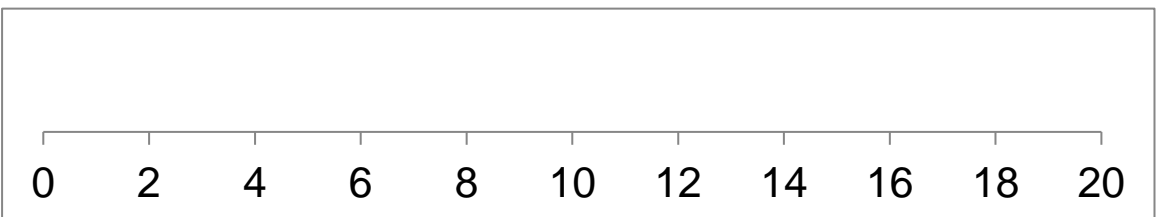
[1]

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



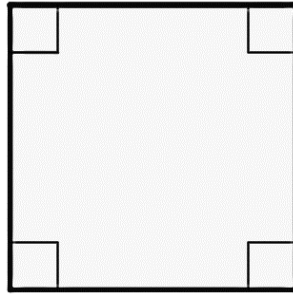
[1]

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



[1]

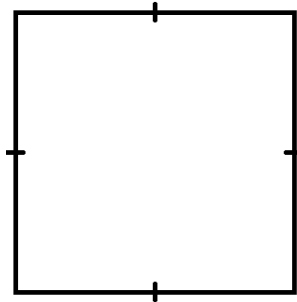
3 A square has 4 right angles.



(a) Name a different shape with 4 right angles.

(a) [1]

(b) A square has 4 equal sides.



Name a 3-sided shape with equal sides.

..... [1]

5 Yannick asked his friends what their favourite fruit was.

(a) Complete his tally chart.

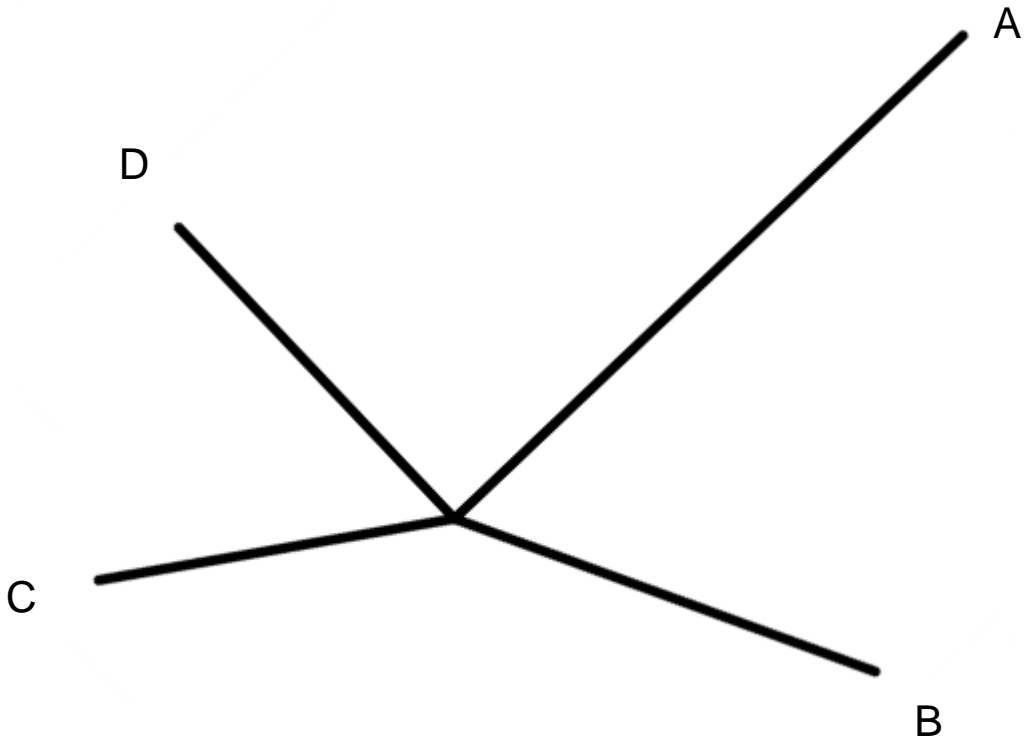
Fruit	Tally	Frequency
Apple	IIII	5
Banana	IIII III	
Orange		6

[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

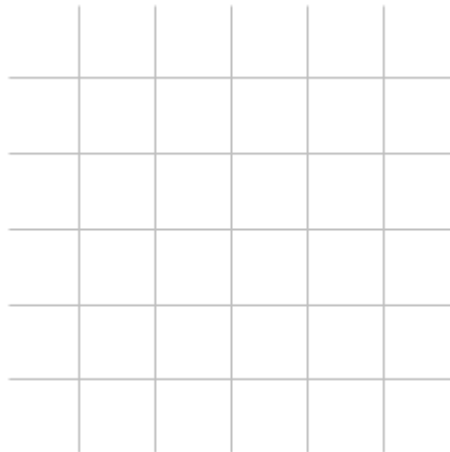
90

81

66

[2]

- 9 Draw a shape with area **8 cm²** 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]

(b) Chang has the following coins.

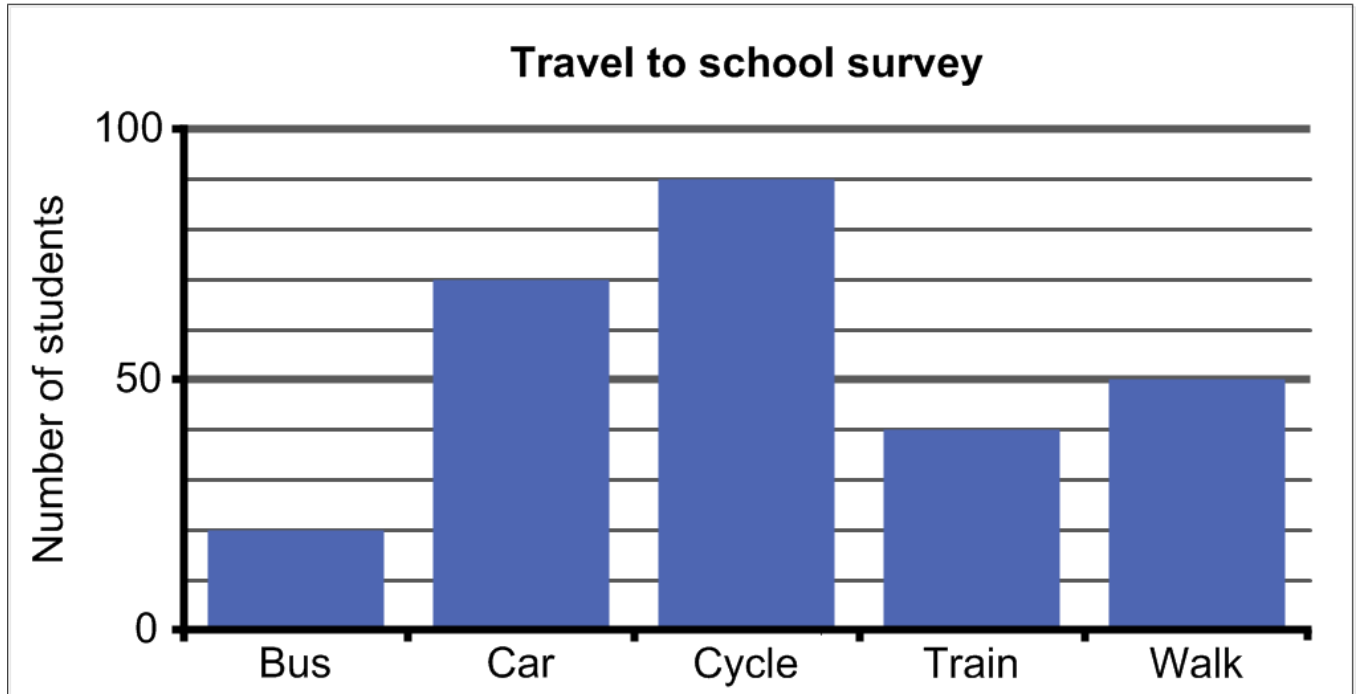
Circle the coins he should use to pay exactly £1.38.



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

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SAMPLE MARK SCHEME

Duration: about 1 hour

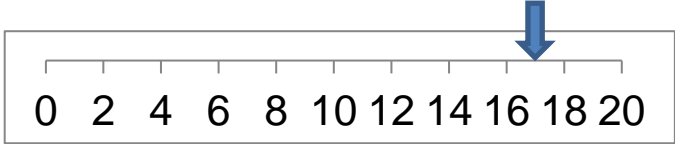
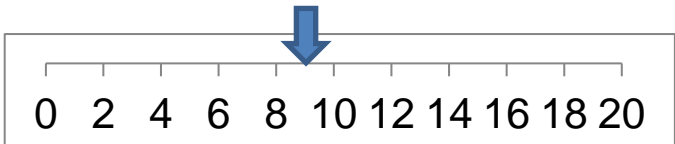
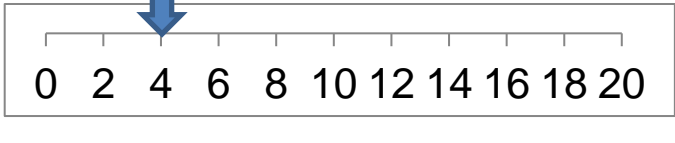
MAXIMUM MARK 40

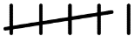
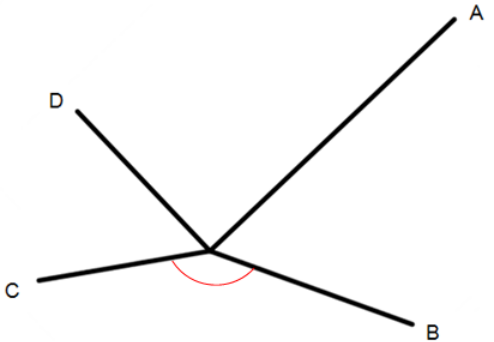
Instructions for marking the internally assessed written tests

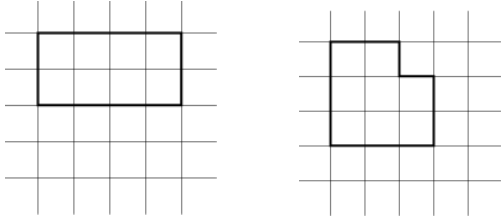
1. All marking must be done in red.
2. Half marks must not be used.
3. Each mark must have a tick on the script as close as possible to the point where the mark is scored. Incorrect responses must have a cross to indicate that the answer given has been considered.
4. The total mark should be shown on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

Question		Answer	Marks	Guidance
4	(a)	9, 7, 5, 3, 2	2	1 mark for starting with 9 or finishing with 2 or for all numbers in numeric order from smallest to largest
	(b)	7	1	cao
	(c)	$8 - 1 = 9 - 2$	1	oe
5	(a)	8 	1 1	cao Tally gate must be used
	(b)	19	2	1 mark for $5 + 8 + 6$ ft their frequencies from part (a) for full marks or part marks
6	(a)		1	Allow any clear indication of correct angle Allow alternative angles if diagram distorted in reproduction
	(b)	Longest	1	Do not accept biggest. Do not penalise misspelling provided clear indication that correct word used

Question		Answer	Marks	Guidance
7		Both numbers have one lot of hundreds but 170 has seven tens which is more than 107 which has zero tens	2	1 mark for identifying hundreds place value the same 1 mark for comparison of tens column Award 1 mark only if points indicated on a sketched number line
8		15 and 90 only circled	2	1 mark for either 15 or 90 identified regardless of any other values mistakenly picked
9		Shape drawn with correct area and perimeter e.g. 	3	1 mark for attempt at finding a shape with an area of 8 cm ² e.g. 1 by 8, 2 by 4 1 mark for attempt at finding a shape with a perimeter of 12 cm e.g. 1 by 5, 2 by 4, 3 by 3
10	(a)	28	1	cao
	(b)	40	2	cao 1 mark for + 9
11		9, 13 and 15	3	2 marks for 9 or for 13 <u>and</u> 15 seen Or 1 mark for attempt to find sequence rule e.g. $19 - 17 = 2$

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 + 4 × 12 = 138p = £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 = 270	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 students

Summary of Updates

Date	Version	Change
September 2019	2	Amends to the mark scheme and some of the images.
July 2021	2.1	Rubric amended to show use of a protractor is permitted