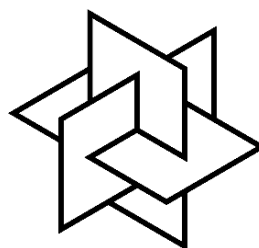

CE AT 13+

MATHEMATICS



ISEB
Independent Schools
Examinations Board

Foundation Non-Calculator Specimen Paper Mark Schemes

Date

Information

This is a suggested, not prescriptive, mark scheme.

Full marks should not be awarded to **correct** answers unsupported by necessary working.

Marks should be deducted for mathematically incorrect working.

A maximum of 1 mark per question should be deducted for incorrect/missing **units up to a maximum of 3 marks per paper (excluding explicit units questions.)**

Credit should be given for good attempts and ideas.

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FOUNDATION MATHEMATICS: NON-CALCULATOR

Q.	Answer	Mark	Additional Guidance																																																	
1. a)	i) 1321 ii) 714	4	M: 2 A: 2																																																	
b)	i) 77 ii) 222	4	M: 2 A: 2																																																	
2. a)	86	2	A: 2																																																	
b)	540		1 mark for 2 correct																																																	
c)	4.8																																																			
3.	<table><tr><td></td><td></td><td>5</td><td>2</td><td>6</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>8</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td>7</td><td>3</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>1</td><td>•</td><td>4</td></tr><tr><td></td><td>8</td><td>2</td><td>0</td><td>0</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td>2</td><td>•</td><td>7</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>5</td></tr></table>			5	2	6							8						7	3							1	•	4		8	2	0	0							2	•	7							5	3	A: 3 lose 1 mark for each error
		5	2	6																																																
				8																																																
			7	3																																																
				1	•	4																																														
	8	2	0	0																																																
				2	•	7																																														
						5																																														
4. a)	<div>$\frac{1}{4}$ 0.5 $\frac{3}{4}$ 0.25 $\frac{1}{2}$ 7.5 $7\frac{1}{2}$ 0.75</div>	4	A: 4																																																	
b)	i) $\frac{9}{10}$ ii) $\frac{3}{100}$	2	A: 2																																																	
c)	i) 17 ii) 4 iii) 4	3	A: 3																																																	
d)	3, 3.1	2	A: 2																																																	
5. a)	F	2	A: 2																																																	
b)	T		lose 1 mark for each error																																																	
c)	F																																																			
d)	F																																																			

Q.	Answer	Mark	Additional Guidance
6. a)	$8 + 3$	1	A: 1
b)	$480 \div 12$	1	A: 1
c)	150×6	1	A: 1
d)	$74 - 28$	1	A: 1
7.	6	2	A: 2
8. a)	56.27	4	M: 2
b)	74.7		A: 2
9. a)	i) $\frac{3}{4}$	1	A: 1
b)	i) $\frac{1}{2}$ ii) $\frac{1}{6}$	4	M: 2 A: 2
10. a)	456	3	A: 3
b)	864		
c)	24		
11.	16 cm^2	2	A: 2 1 mark for 16 1 mark for cm^2
12.	0.8	2	A: 2
13.	12 m^2	3	M: 1 A: 2 must have units
14. a)	i) $\frac{6}{15}$ ii) $\frac{12}{100}$	2	A: 2
b)	they are the same size	1	A: 1
c)	$\frac{3}{4}$	2	A: 2 1 mark for partial reduction
15.	30 m^2	3	M: 1 A: 2 must have units
16.	$\frac{3}{20}$	2	A: 2
17. a)	$t \approx 25^\circ$ $s \approx 100^\circ$	3	A: 3 allow generous margin
b)	$x = 83^\circ$ $p = 320^\circ$ $y = 133^\circ$ $q = 34^\circ$ $m = 54^\circ$	8	M: 3 A: 5

Q.	Answer	Mark	Additional Guidance
18.	35 000	3	M: 2 for 500 x 70 A: 1
19.	$a = 3$ $b = 9$	4	M: 2 A: 2
20. a)	19	6	M: 3 A: 3
b)	17		
c)	9		
21. a)	35	3	M: 2 A: 1
b)	4 : 5	2	A: 2 1 mark for partial simplification
22.	13	3	M: 2 A: 1
23. a)	25	7	M: 4 A: 3
b)	36		
c)	80		
Total		100	