Version 1.1

ASSESSMENT and QUALIFICATIONS ALLIANCE

General Certificate of Secondary Education

Applications of Mathematics 9370

Unit 1 Foundation Tier 93701F

Mark Scheme

Specimen Paper

Mark Schemes

Principal Examiners have prepared these mark schemes for specimen papers. These mark schemes have not, therefore, been through the normal process of standardising that would take place for live papers.

Further copies of this Mark Scheme are available to download from the AQA Website: www.aqa.org.uk

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Glossary for Mark Schemes

GCSE examinations are marked in such a way as to award positive achievement wherever possible. Thus, for GCSE Mathematics papers, marks are awarded under various categories.

M	Method marks are awarded for a correct method which could lead to a correct answer.
A	Accuracy marks are awarded when following on from a correct method. It is not necessary to always see the method. This can be implied.
B	Marks awarded independent of method.
Q	Marks awarded for quality of written communication. (QWC)
M dep	A method mark dependent on a previous method mark being awarded.
B dep	A mark that can only be awarded if a previous independent mark has been awarded.
ft	Follow through marks. Marks awarded following a mistake in an earlier step.
SC	Special case. Marks awarded within the scheme for a common misinterpretation which has some mathematical worth.
oe	Or equivalent. Accept answers that are equivalent. eg, accept 0.5 as well as $\frac{1}{2}$
eeoo	Each error or omission.

A1 Foundation Tier

Q	Answer	Mark	Comments
1(a)	2×57 or 2×0.57	M1	oe
	1.14	A1	Accept 114 p
1(b)	$1.08 + 54$	M1	oe
	1.62	A1	Accept 162 p
1(c)	(£) 3.28 seen	M1	oe
	0.78	A1	Accept 78 p
2(a)(i)	70	B1	Accept 70.00
2(a)(ii)	3×110	M1	
	330	A1	
2(a)(iii)	$88 + 138 + 138$	M1	oe
	364	A1	
2(b)	17	B2	B1 For 16 or 18 or attempt to count up the days eg, $10 + 7$

Q	Answer	Mark	Comments
3(a)	35	B1	
3(b)	1420 or 1455 seen	B1	
	(their 1420) – 25 (minutes)	M1	
	1355	A1	oe
3(c)(i)	1.50 × 2 (+) 0.85 × 2	M1	oe
	3.00 + 1.70 (= 4.70)	M1	
	4.70 and yes	A1	Yes can be implied eg, 30 p change
3(c)(ii)	Totals seen 8, 14, 21, 23, 3	M1	Allow one error
	1.50 × their 8 1.50 × their 14 0.95 × their 21 0.50 × their 23 0.85 × their 3	M1	Allow one extra error
	12 21 19.95 11.5(0) 2.55	A1 ft	
	67	A1	QWC Strand (iii) - To achieve a correct solution a clear organised approach must be evident
4(a)	Wednesday	B1	oe
4(b)	4 + 5 + 2 + 6 (or 17)	M1	Allow one error
	Girls 18 × 2 (= 36)	M1	
	Their 36 – (7 + 6 + 8 + 6) or 9	M1	Allow one error
	Fully correct chart Boys 1 Girls 9	A1 ft	
4(c)	$\frac{8}{10}$	B2	B1 For 8 seen oe

Q	Answer	Mark	Comments
5	75 (+ 2) – 32 (= 45)	M1	
	Their 45 × 5	M1	
	Their 225 ÷ 9	M1	
	25	A1	
6(a)	1 hour 10 minutes	B1	
6(b)	20 (–) 5	M1	
	15	A1	
6(c)	0, 0, 5, 5, 5, 10, 15, 20, 30	M1	
	Median 5 indicated	A1	
6(d)	(45 + 60 + 5 + 25) ÷ 9	M1	
	15	A1	Need not be in table
6(e)(i)	Mean is less	B1	oe (most) advertised journey times are shorter
6(e)(ii)	Median is less or mode is less	B1	oe Fewer lates
7	Use of A × 5 ÷ 100	M1	
	(£)75	A1	
8(a)	$\frac{195 + 210}{2}$	M1	oe eg, $\frac{195 + 15}{2}$
	= 202.5	A1	
8(b)	165 – 30	M1	oe
	135	A1	
Alt 8(a)	Attempt to plot 4 given points	M1	
Alt 8(b)	202.5	A1	
	Extending line to origin	M1	
	135	A1	

Q	Answer	Mark	Comments
9	500 × 1.14	M1	
	Their 570 – 484	M1	
	Their 86 ÷ 1.18	M1	
	72.88	A1	
10(a)	18 245 – 8500	M1	
	Their 9745 ÷ 5 or 1949	M1	
	1950	A1	
10(b)	8500 – their (1950)	M1	
	(£) 6550	A1	
11(a)	= B3 + C3	B1	
11(b)	575 ÷ (575 + 240) × 100	M1	
	70.6 and 815	A1	70.55 ... and 815
12	Trial using 15 customers	M1	eg, 15 × £10 = £150
	Second trial	M1	eg, 14 × £10 = £140 1 × £20 = £20
	Any solution leading to > £200	A1	
	10	A1	

Q	Answer	Mark	Comments
13(a)	(2, 72) circled	B1	
	Indicates away from pattern	B1	oe Not close to line of best fit Outlier
13(b)	Best fit line drawn	B1	From (1, 15) – (1, 25) To (5, 65) – (5, 80)
13(c)(i)	Read off at 4 using their line of best fit	M1	eg, 52 Allow 54 to 62 with no line of best fit
	Their 52 – 40	A1	eg, 12
13(c)(ii)	Quite a small sample or mention of any other variable that could confound	B1	oe
14(a)	All four formulae circled	B2	B1 For 2 or 3 circled Accept other clear indication
14(b)	1.15 × 480	M1	oe (Using a different formula)
	552	A1	
	(Their 552) ÷ 4	M1	Allow 480 ÷ 4 (as misread)
	138	A1ft	Allow 120
	(their 552 – 138) ÷ 24 or 414 ÷ 24	M1	Allow 360 ÷ 24
	17.25	A1	QWC Strand (iii) - To achieve a correct solution a clear organised approach must be evident