Version 1.0

General Certificate of Secondary Education

Mathematics 4360

Unit 2 Foundation Tier 43602F

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

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales 3644723 and registered charity number 1073334.
Registered address AQA, Devas Street, Manchester M15 6EX *Dr Michael Cresswell Director General.*

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.
M dep	A method mark dependent on a previous method mark being 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.

Unit 2 Foundation Tier

Q	Answer	Mark	Comments
1(a)	Five thousand one hundred and sixty seven	B1	
1(b)	7400	B1	
1(c)	17 000	B1	
1(d)	16 684 – 1184	M1	
	15 500	A1	
2(a)(i)	70	B1	
2(a)(ii)	5	B1	
2(a)(iii)	25	B1	
2(a)(iv)	75	B1	
2(b)	150	B2	oe B1 For $\frac{70}{35}$ or 2 seen
3	800 ÷ 10 (= 80)	M1	oe
	70 ÷ 5 (= 14)	M1	oe
	94	A1	
4	(£) 1.20 or (£) 1 seen	M1	oe
	10 – their 1.20 – their 1	M1	
	7.80	Q1	Strand (i) Correct notation required Do not accept 7.8
5(a)	11	B1	
5(b)	15	B1	
5(c)	($2c = 11 + 3 = 14$) Their 14 ÷ 2	M1	
	7	A1	

Q	Answer	Mark	Comments
6	Finds the cost of two or more portions of different fruit	M1	eg, apple + banana = 30 + 25 (= 55 p)
	Finds the cost of two or more portions of different vegetables	M1	eg, carrots + broccoli = 20 (or 40) + 75 (= 95 p or £ 1.15 (oe))
	Finds the cost for one day (five portions) or more	M1	eg, 2 apples + 3 bananas = 2 × 30 + 3 × 25 (= 1.35)
	A full attempt which misses one criterion	M1 dep	eg, not using 2 different fruit and vegetables **or** not keeping under £ 10 **or** otherwise correct work on a five day week
	35 items with at least 2 different fruit and vegetables and total cost less than or equal to £ 10	Q1	Strand (iii) Must see an organised response with all criteria met
7	15 + 7 × 40 or 295	M1	7 × 40 or 280
	(their) 295 ÷ 60 or 4 h 55 m	M1	(their) 280 ÷ 60 or 4 h 40 m oe
	12:45 – (their) 4 h 55 m	M1	12:45 – (their) 4 h 40 m – 15 m
	07:50	A1	oe SC3 08:05
8	60 ÷ 5 × 3 or 60 ÷ 15 × 4	M1	oe
	Fiona = 36	A1	
	James = 16	A1	
	20	A1	
9(a)	14	B1	
	41	B1 ft	ft Their first answer × 3 – 1
9(b)	10, 15, 20	B1	
9(c)	$3n$	M1	
	$3n + 4$	A1	

Q	Answer	Mark	Comments
10(a)	5 (×) 4	M1	At least one correct
	20	A1	
10(b)(i)	81	B1	
10(b)(ii)	Always even ticked and a valid example eg, $9^2 + 3^2 = 90$	B2	B1 If example incomplete eg, $9^2 + 3^2$
11	12 or any common denominator used	M1	eg, $\frac{3}{12}$ or $\frac{8}{12}$
	$\frac{11}{12}$	A1	
12	Sight of $\sqrt{100}$ or 10 and 20	M1	
	0.5	A1	oe (processed) eg, $\frac{1}{2}$
13	$w = 3 \quad x = 8 \quad y = 7$	B3	B1 Each
14	17.5 – 15 (= 2.5)	M1	
	Correct method for finding 2.5% of 140	M1	eg, 1% = 140 ÷ 100 (= 1.4) Their 1.4 × 2 + their 1.4 ÷ 2
	3.50	Q1	Strand (i) Correct notation required Do not accept 3.5
	Alternate method		
	Correct method for finding 15% of 140	M1	eg, 10% = 140 ÷ 10 (= 14) Their 14 + their 14 ÷ 2
	Correct method for finding 17.5% of 140 and subtracts	M1	Their 15% + (their 14 ÷ 2) ÷ 2
	3.50	Q1	Strand (i) Correct notation required Do not accept 3.5

Q	Answer	Mark	Comments
15(a)	$2000 \times 12 \div 50 \times 5$	M1	oe
	2400	A1	
15(b)	$(12 \times 2000) \times (0.)10$ $(= 2400$ or $240\,000)$	M1	Annual other running cost
	$0.4 \times 24\,000$ $(= 9600)$	M1	Annual income
	4800	A1 ft	Profit after deductions Their 9600 – their 2400 – their 2400
	4800 > 3000, so YES	Q1	Strand (iii) Valid conclusion with working clearly shown
16(a)	$C = 10d + 5$	B1	
16(b)	Correct substitution of a value for d in formula	M1	20, 25, 30
	Identifies equal pay at $d = 2$	M1 dep	
	No and cheaper at $d > 2$	A1	oe
	Alternate method		
	Plots at least two correct coordinates on graph for mountain bike	M1	(0, 15) (1, 20) (2, 25) (3, 30)
	Correct line at least as far as intersection at (2, 25)	M1 dep	
	No and cheaper at $d > 2$	A1	
17	1200	B1	or 8400 seen
	12000	B1	