



GCSE Foundation

Algebra



64 minutes



59 marks

Graphs

M1.	(a) (2, 5)	B1	
	(b) B plotted at (8, 1)	B1	
	(c) (5, 3)	B2 ft	[4]
	<i>ft from their B</i> <i>B1 ft for 1 number correct or point shown on grid</i>		
M2.	(a) (2, 6)	B1	
	(b) Point plotted at 5 across and 3 up	B1	[2]
M3.	(a) (2, 5)	B1	
	(b) Point (6, 1) plotted	B1	
	(c) (6, 5)	B1 ft	
	<i>ft if (6, 1) is wrongly plotted but their D completes a rectangle</i>		
	(d) (4, 3)	B1 ft	[4]
	<i>ft for rectangle</i>		
M4.	(a) y -values 8, 4 and 0 <i>B1 for two correct</i>	B2	
	(b) Correct line <i>B1 ft six points plotted from their table</i>	B2	[4]

M5. (a) Fully correct rectangle
B1 for one correct side **B2**

(b) (i) Sometimes true **B1**

(ii) Never true **B1**

(iii) Always true **B1**

[5]

M6. (a) (i) (£) 15 **B1**

(ii) Company A **B1**

Cheaper or only £10 or £5 less **B1**

(b) (i) 300 – 250 **M1**

50 **A1**

(ii) (£) 20 **B1**

$20 \div 0.25$
oe **M1**

80 **A1**

[8]

M7. (a) (£) 19
£ 19.00 (p)
Condone 19.0 **B1**

(b) Attempt to use 60 minutes in 1 hour
eg, 24 + 27
Sight of 60 (in a calculation) **M1**

51 (minutes) **A1**

- (c) (i) 2 (hours) B1
- (ii) 4 (hours) B1
- (iii) 120 B1
- (d) London to Brighton **and** steeper
 oe Accept: takes less time, 2 hrs and $3\frac{1}{2}$ hrs, 1st journey B1
- [7]

- M8.** (a) $(500 - 300) \times 6$
 or 200×6
 or (£) 12
 or 1200
 $(250 - 100) \times 10$
 or 150×10
 or (£) 15
 or 1500
 Option 1 M1
- (£) 27 or 62 or 24 or 59
 Accept pence A1
- $(500 - 100) \times 6$ or 400×6
 Option 2 M1
- (£) 27 and 24 or 62 and 59
 Accept pence A1
- Option 2 (cheaper) B1 ft
- (b) (i) £ 25 B1
- 150 B1
- (ii) Attempt to read one coordinate between 150 and 500
 $\pm £1$
 eg, 250, 30
 (500, £41.50 - 43.50 inclusive)
 Allow 350, 42.5 (± 1)
 Not (150, 25) M1

Correct statement

eg, £1 for 20 mins

£2 for 40 mins

£5 for 100 mins

£10 for 200 mins

Their £17.50 (± 1) for 350 mins

(Their change -25) **and** (their mins - 150)

0.05

M1 dep

5

£0.05

A1

[10]

M9. (a) 13 to 14 inclusive

B1

(b) 26 to 28 seen

B1

35 to 37 seen

B1

*Allow incorrect written values if they are correctly
and unambiguously indicated on the graph*

Yes or increase gap (by 9 m)

oe

*This mark can **only** be awarded if justified by
(their) values from the graph.*

B1

[4]

M10. (a) -1

B1

(b) Correct curve from $x = -2$ to 2 ± 2 mm from integer points

*B1 Four points plotted correctly from (-2, 2)
(their) (-1, -1), (0, -2), (1, -1) and (2, 2)*

B2

(c) (x values at points where) curve crosses x-axis

oe

B1

[3]

M11. (a) (2, 3)

B1

(b) (2, 8)

B1

(c) 5×3

M1

15

A1

[4]

M12. (a) -1 and 3

B1

(b) Line drawn from (-1, -3) to (3,5)

B1 for 3 points plotted correctly

B2

[3]

