



GCSE Foundation 08

Number



155 minutes



148 marks

Calculation

M1. 198

*B1 for attempt at correct method of subtraction
or adding on eg 8 in units column
or sight of decomposition $77 + 21 (+100)$*

B2

[2]

M2. $2 \times 9.25 (= 18.5(0))$ or $2 \times 5.5(0) (= 11.(00))$

M1

29.5(0)

A1

4.5(0)

ft from their $29.5(0) - 25$

B1 ft

Complete method shown

Strand (iii)

For finding cost of 2 adult tickets

+ 2 child tickets and subtracting 25

Q1

[4]

M3. 85 and 115

Either order

B1 for 2 numbers adding to 200

B1 for 2 numbers with a difference of 30

B1 for 1 correct

B2

[2]

M4. -7 and $2 = -5$

and

-5 and $0 = -5$

and

-3 and $-2 = -5$

Either order for each pair

B1 for 2 pairs with a total of -5

B1 for 2 pairs with same correct total

eg -5 and $2 = -3$

-3 and $0 = -3$

or *-7 and $0 = -7$*

-5 and $-2 = -7$

B1 for 3 correct pairs with incorrect totals

B2

[2]

M5. (a) $(0).421875$

B1

(b) $(0).422$

ft any value 4 decimal places or more

B1 ft

[2]

M6. (a) 5

B1

(b) 94 and 60 **chosen**

or $94 - \text{their } 60$

or $\text{their } 94 - 60$

M1

34

A1

[3]

M7. 30 or 5

Allow 30.0 or 5.0

M1

150

Allow $[145, 156]$, but not 153.92 rounded.

A1

[2]

M8. (a) 17

B1

(b) 55

B1

(c) 9

B1

(d) 180

B1

[4]

M9. $\frac{15}{100}$ or 0.15 seen

oe eg (10% \Rightarrow) 300 or (5% \Rightarrow) 150 or (1% \Rightarrow) 30

M1

$$\frac{15}{100} \times 3000$$

oe 300 + 150

M1dep

450

A1

Yes

*Strand (iii) Correct conclusion from their answer.
Must have scored 1st M1.*

Q1ft

[4]

M10. (a) Three thousand eight hundred (and) forty

B1

(b) 5012

B1

(c) 400

oe
Accept (four) hundred(s)

B1

(d) 3000

B1

(e) Any correct method of a subtraction with not more than one error

M1

142

SC1 152 or 242

A1

[6]

M11. (a) Shows that $5 \div 2$ must be done first so $\text{LHS} = 17 - 2\frac{1}{2} + 4$
 $2\frac{1}{2}$ or 2.5 seen is enough

B1

(b) $(17 - 5) \div 2 + 4 = 10$

B1

(c) $(17 - 5) \div (2 + 1) \times 4 = 16$

B1

[3]

M12. Sight of 12p or 24p or 36p or (£)1.2(0) or (£)3.6(0)
eg 0.12 or 0.24 or 0.36

M1

7200 ÷ their 36 (= 200) or 72 ÷ their 3.60
oe

M1 dep

20

SC2 60

A1

All calculations and working clearly shown

Strand (iii)

Must have both Ms awarded

Q1

[4]

M13. (a) 49

25

10

*B1 for one correct
or for their 25 + 24 in top cell*

B2

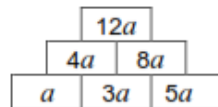
(b) $4a$

B1

$8a$ or $12a$ – their $4a$

B1 ft

$5a$ or their $8a - 3a$



B1 ft

[5]

M14. (a) Five thousand, four hundred and seventy two

B1

(b) 2457

B1

(c) 7425

B1 for 7542 or any other odd number using these 4 digits

B2

(d) 5500

B1

[5]

M15. 150 – 100 or 50 or 285 – 200 or 85

M1

their 50×12 or 600 or 6

M1

their 85×10 or 850 or 8.5(0)

M1

their 6 + their 8.5(0) + 15
 oe Allow mixed units

M1

29.50

Strand (i)
 Correct notation
 Do not accept 29.5
 SC4 14.50
 SC3 14.5

Q1

[5]

M16. (a) Five thousand one hundred and sixty seven

B1

(b) 7400

B1

(c) 17 000

B1

(d) 16 684 – 1184

M1

15 500

A1

[5]

M17. (a) 684

B1

(b) At least one value to 1 sf
 100 or 25

M1

4

A1

[3]

M18.	(a) Any correct product	M1	
	6 × 34 or 204 seen	A1	
	(b) 108 ÷ 6	M1	
	18	A1	[4]

M19.	(a) 704	B1	
	(b) (i) 4	B1	
	(ii) 400	B1	[3]

M20.	(a) 120 ÷ 10 or 12 120 ÷ 10 ÷ 4 × 7	M1	
	Their 12 ÷ 4 or 3	M1dep	
	Their 3 × 7	M1dep	
	21	A1	

(b) Correct build up seen (exc VAT)

$$\text{eg, } 50 + 10 + 1 \\ 20 + 20 + 20 + 1$$

M1

Correct build up seen (inc VAT)

$$\text{eg, } 58.75 + 11.75 + 1.18 \\ 23.5 \times 3 + 1.18$$

M1dep

[71.68, 71.98]

SC2 For [10.68, 10.98]

A1

[7]

M21. (a) 19

B1

(b) 21

B1

(c) 5

B1

[3]

M22. (a) $\sqrt{387.5}$

$$\text{or } length^2 = 387.5$$

M1

19.685(01969)

A1

(b) 19.7

B1ft

[3]

M23. (a) $50 \div 4.99$ or $50 \div 5$

M1

10

A1

- (b) $20 \times (\text{£}) 5(.00)$ without error
Sight of 49.9 or 99.8 or 4×20

M1

No and valid explanation
eg, Decimal point in wrong place
About (£) 100
 $4 \times 20 = 80$
 $5 \times 20 = 100$
Correct answer is (£) 99.8(0)
Arithmetic errors made is M1A0

A1

[4]

M24. Any product that makes 1000

B1

125 and 8

B1

[2]

M25. (a) 176

B1 Units digit 6

B2

(b) (i) 19

B1

(ii) Their 19×2

M1

38

ft is only for using Their (b)(i) $\times 2$

A1ft

(c) 0.09

B1

[6]

M26. 1.5×98
 1.5×0.98 **M1**

249 – Their 147
 $2.49 - \text{Their } 1.47, 0.17 \text{ or } 17 \text{ gets } M2$ **M1**

Their $102 \div 85$
 Only dependent on 2nd M1
 Their $1.02 \div 0.85, 1.02 \div 85$, not $2.49 \div 85$ **M1 dep**

1.2
 SC2 0.012 or other position of decimal point **A1**

[4]

M27. $3 \times 52 (=156)$
 $245 - 26 (= 291)$ **M1**

their $156 + 26 (= 182)$
 $3 \times 52 (= 156)$ **M1 dep**

245 – their 182
 their 219 – their 156 **M1 dep**

63
 167 SC2 **A1**

[4]

M28. (a) 0.308, 0.35, 0.4 **B1**

 (b) 15.29 **B1**

 (c) (i) 0.08
 $\frac{2}{25}$ **B1**

(c) (ii) 12.5

B1

(d) Square any number between 0 and 1 inclusive and show it
Square any number greater than 1 and show it B1
(number in correct range)² but not evaluated
or evaluated incorrectly B1

[5]

M29. 200/1.82

M2 20370 × 1.82/194 or 200 × 194/1.82

M1

20370/194

M1

their £109.89 – their £105

200 – their 191.1(0) or 20370 – their 21318.(68)

DM1

Japan and £4.89

8.9(0) dollars or 948.(68) yen

A1

[4]

M30. (a) 9.16(...)
9.2

B1

(b) 74.1

74.09, 74.088, 74.08, 74

B1

(c) 374 ÷ 189

M1

£ 1.98

Accept 1.97; and £2 with working

A1

[4]

M31. 7466×6942 ($= 524$)

Allow 1524 (even with no working);
 7466×4.5 M0

M1

Their 524×4.5

$7466 \times 4.5 - 6942 \times 4.5$ M2

M1 dep

Their $2358 \div 100$

M1 dep

£23.58

£68.58 with no working, award SC3 if 1524 seen

A1

[4]

M32. (a) £10.50 adults or £13.60 children

5.25×2 or 3.40×4

M1

24.10

A1

(b) (i) $(44 - 4 \times 5) \div 3$

M1

8

A1

(ii) 7 adults

1 adult

B1

3 children

13 children SC1 for both numbers reversed

B1

(c) (i) Saturday
or 1

B1

(ii) Thursday
or -4

B1

- (d) Attempt at Σx
At least 3 additions

M1

Their $132 \div 6$

DM1

22

A1

[11]

M33. (a) 7

B1

- (b) Their $7 \times 53 = 350$
350 - their 7×35 0.4×53

M1

21

A1

[3]

M34. (a) 50

B1

- (b) 7×5
 35

M1

3×2 subtracted from their 35

M1

29

A1

- (c) 9 questions right
 or 1 question wrong
 or 45 right 2 wrong
*B1 45 correct 1 wrong
 or 9 correct 2 wrong
 or 45 and 2 seen*

B2

[6]

M35. (a) 50

B1

(b) 7×5

35

M1

3×2 subtracted from their 35

M1

29

A1

(c) 9 questions right
or 1 question wrong
or 45 right 2 wrong

*B1 45 correct 1 wrong
or 9 correct 2 wrong
or 45 and 2 seen*

B2

[6]

