



GCSE Foundation 22

Handling Data



33 minutes



33 marks

Sampling and collecting

M1. Continuous **and** sample **and** primary (and none incorrect)

B1 any two correct and up to one incorrect

B2

[2]

M2. (a) 1.99×6 or $199 \times 6 (= 1194)$

M1

11.94

SC1 119.40

SC1 12 (.00)

A1

(b) $\frac{1}{2}$

B1 equivalent fraction to $\frac{1}{2}$ eg $\frac{30}{60}$

or B1 $\frac{n}{60}$ seen with its correct simplest form

SC1 50%

SC1 0.5

B2

(c) 10% circled

Any clear indication

B1

(d) Questionnaire/survey/interview

oe telephone everyone

B1

[6]

M3. (a) (i) 51

B1

(ii) Orders the values

Either way

Allow one error or omission

M1

51

Must come from all 11 numbers correctly ordered

A1

Alternative method

Orders only first 6 or last 6 numbers correctly

M1

51

A1

(iii) Attempts to add values

At least $51 + 50 + \dots$ seen (= 550)

M1

their $550 \div 11$

M1 dep

50

SC3 working and correct answers to (a)(ii) and (a)(iii) swapped over

A1

(b) (i) Mean/mode/median are 50 or above

oe All but one are 50 or more

B1 ft

(ii) One bag is 43

oe Sample size too small

One (or some) bag(s) have less than 50

B1 ft

(c) Take a larger sample

oe Need more data

B1

Spread the sample out over days

oe Sample at random

B1

[10]

M4. (a) Sheet with 10 rows or columns and a section for distance and fare

Deduct a mark if not complete

B2

(b) Longer taxi rides always cost more and cost per mile should be about same

oe

B1

- (c) (i) £4.60 - £5.00 B1
- (ii) Line of best fit
Fares about double distance M1
- 14
ft their line of best fit A1
- (d) Yes, positive correlation
Accept: No, correlation is weak positive B1

[7]

- M5.** (a) (i) Too vague
oe B1
- (ii) Not enough choices or choices overlap
oe B1
- (b) Response section that covers values from 0 to at least 5 with no missing values and no overlapping values B1
- (c) (i) Too small a sample or other sensible reason
eg, may not have anyone whose surname begins with X or Z B1
- (ii) Method 2, all patients have equal chance B1

[5]

M6. R Y G

M 3 2 2

F 2 1 3

Table 3 × 2 or 2 × 3

If gender ignored and total number of students used M0

M1

Fully correct

Accept tally marks;

4 or 5 correct entries A1; SC2 for

M			F		
R	Y	G	R	Y	G
3	2	2	2	1	3

or

M		F	
R	3	R	2
Y	2	Y	1
G	2	G	3

Or

	R	Y	G
M	3	2	2

	R	Y	G
F	2	1	3

4 or 5 correct entries SC1

A2

[3]

