

1. Mr Brown owns a café in the town centre.
He wants to find out what people think of the service in the cafe.

He uses this question on his questionnaire.

What do you think of the service in the cafe?		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excellent	Very good	Good

- (a) Write down **one** thing that is wrong with this question.

.....
.....
.....

(1)

Mr Brown wants to find out how often people visit the town centre.

- (b) Design a suitable question for his questionnaire to find out how often people visit the town centre.
You must include some response boxes.

(2)
(Total 3 marks)

2. Mr Beeton is going to open a restaurant.
He wants to know what type of restaurant people like.
He designs a questionnaire.

- (a) Design a suitable question he could use to find out what type of restaurant people like.

(2)

He asks his family “Do you agree that pizza is better than pasta?”

This is **not** a good way to find out what people who might use his restaurant like to eat.

- (b) Write down **two** reasons why this is **not** a good way to find out what people who might use his restaurant like to eat.

First reason

.....

Second reason

.....

(2)
(Total 4 marks)

3. The manager of a school canteen has made some changes. She wants to find out what students think of these changes.

She uses this question on a questionnaire.

"What do you think of the changes in the canteen?"

Excellent

Very good

Good

- (a) Write down what is wrong about this question.

.....
.....
.....

(1)

This is another question on the questionnaire.

"How much money do you normally spend in the canteen?"

A lot

Not much

- (b) Write down one thing that is wrong with this question.

.....
.....
.....

(1)

(Total 2 marks)

4. The manager of a school canteen has made some changes. She wants to find out what students think of these changes.

She uses this question on a questionnaire.

"What do you think of the changes in the canteen?"

Excellent

Very good

Good

- (a) Write down what is wrong about this question.

.....
.....
.....

(1)

This is another question on the questionnaire.

"How much money do you normally spend in the canteen?"

A lot

Not much

- (b) (i) Write down one thing that is wrong with this question.

.....
.....
.....

(1)

- (i) Design a better question for the canteen manager to use. You should include some response boxes.

(2)
(Total 4 marks)

5. The manager of a school canteen has made some changes. She wants to find out what students think of these changes.

She uses this question on a questionnaire.

"How much money do you normally spend in the canteen?"

A lot

Not much

Design a better question for the canteen manager to use. You should include some response boxes.

(Total 2 marks)

6. Janie wants to collect information about the amount of sleep the students in her class get. Design a suitable question she could use.

(Total 2 marks)

7. Petros wants to find out how teenagers communicate with each other. He designs a questionnaire. Here are two of his questions. The questions are **not** suitable. For each question, write down a reason why.

(i) Do you prefer to communicate with your best friend by mobile phone or by e-mail?

Yes No

Reason.....

(ii) How many e-mail addresses do you have?

1 2 3 4

Reason.....

(Total 2 marks)

8. A student wanted to find out how many pizzas adults ate.

He used this question on a questionnaire.

‘How many pizzas have you eaten?’

A few

A lot

(a) Write down **two** things that are wrong with this question.

.....

(2)

He gave his questionnaire to 10 of his teachers.

(b) Give **two** reasons why this is not a good way to find out how many pizzas adults ate.

1st Reason.....

.....

2nd Reason.....

.....

(2)
(Total 4 marks)

9. A student wanted to find out how many pizzas adults ate.

He used this question on a questionnaire.

‘How many pizzas have you eaten?’

A few

A lot

(a) Write down **two** things that are wrong with this question.

.....

.....

.....

(2)

- (b) Design a better question that the student can use to find out how many pizzas adults ate.
You should include some response boxes.

(2)
(Total 4 marks)

10. A student wanted to find out how many pizzas adults ate.

He used this question on a questionnaire.

‘How many pizzas have you eaten?’

A few

A lot

This is not a good question.

Design a better question that the student can use to find out how many pizzas adults ate.
You should include some response boxes.

(Total 2 marks)

11. Matthew wants to collect information about the time students take to travel to school.

Design a suitable question he could use on a questionnaire.

(Total 2 marks)

12. Sarah wants to survey students in her school about which vegetables they eat.

These vegetables are on the menu in the school canteen.

carrots peas cauliflower broccoli swede

- (a) Design a suitable question she could use for a questionnaire to find out which of these vegetables each student eats.

(2)

There are 800 students in Sarah’s school.

Sarah selects 50 students at random.

30 of these 50 students eat carrots.

(b) Work out an estimate for the number of students in Sarah’s school who eat carrots.

.....

(2)
(Total 4 marks)

13. Naomi wants to find out how often adults go to the cinema.

She uses this question on a questionnaire.

“How many times do you go to the cinema?”

Not very often

Sometimes

A lot

(a) Write down **two** things wrong with this question.

1

.....

2

.....

(2)

- (b) Design a better question for her questionnaire to find out how often adults go to the cinema.
You should include some response boxes.

(2)
(Total 4 marks)

14. Fred is going to take a survey of the magazines read by students.

He wants to design a questionnaire.

- (a) Design a suitable question that he could use to find out what types of magazine students read.

(2)

Fred put the question below on his questionnaire.

‘How many magazines have you read?’

A few

A lot

- (b) Design a better question.
You should include some response boxes.

(2)
(Total 4 marks)

15. The manager of a school canteen has made some changes. She wants to find out what students think of these changes.

She uses this question on a questionnaire.

“How much money do you normally spend in the canteen?”

A lot

Not much

Design a better question for the canteen manager to use. You should include some response boxes.

(Total 2 marks)

16. Sanjay prepares a questionnaire.

Here is one of his questions.

What is your age in years?	
<input type="checkbox"/>	under 20
<input type="checkbox"/>	20 – 30
<input type="checkbox"/>	30 – 40
<input type="checkbox"/>	40 – 50
<input type="checkbox"/>	over 50

What is wrong with this question?

.....

.....

(Total 1 mark)

17. Daniel is conducting a survey into the amount of money that teenagers spend on magazines.

He uses this question on a questionnaire.

“How much money do you spend on magazines?”

£1	£2	£3
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Write down **two** things that are wrong with this question.

.....

.....

.....

(Total 2 marks)

18. A student wanted to find out how many pizzas adults ate.

He used this question on a questionnaire.

‘How many pizzas have you eaten?’

<input type="checkbox"/>	<input type="checkbox"/>
A few	A lot

Write down **two** things that are wrong with this question.

.....

.....

.....

(Total 2 marks)

19. Toby wants to find out how many text messages people send.

He uses this question on a questionnaire.

How many text messages have you sent on your mobile phone?			
0 – 10	10 – 20	20 – 30	30 or more

Write down **two** things wrong with this question.

- 1
-
- 2
-

(Total 2 marks)

20. Melanie wants to find out how often people go to the cinema.

She gives a questionnaire to all the women leaving a cinema.

Her sample is biased.

Give **two** possible reasons why.

- 1
-
- 2
-

(Total 2 marks)

21. Valerie is the manager of a supermarket.

She wants to find out how often people shop at her supermarket.
She will use a questionnaire.

Design a suitable question for Valerie to use on her questionnaire.
You must include some response boxes.

(Total 2 marks)

22. Poppy wants to find out for how much time people use their computer.

She uses this question on a questionnaire.

For how much time do you use your computer?

0–1 hours	<input type="checkbox"/>	3–4 hours	<input type="checkbox"/>
1–2 hours	<input type="checkbox"/>	4–5 hours	<input type="checkbox"/>
2–3 hours	<input type="checkbox"/>	5–6 hours	<input type="checkbox"/>

Write down **two** things that are wrong with this question.

1

.....

2

.....

(Total 2 marks)

23. Poppy wants to find out for how much time people use their computer.
She uses this question on a questionnaire.

For how much time do you use your computer?

0–1 hours	<input type="checkbox"/>	3–4 hours	<input type="checkbox"/>
1–2 hours	<input type="checkbox"/>	4–5 hours	<input type="checkbox"/>
2–3 hours	<input type="checkbox"/>	5–6 hours	<input type="checkbox"/>

- (a) Write down **two** things that are wrong with this question.

1

.....

2

.....

(2)

Poppy gives her questionnaire to all the students in her class.

Her sample is biased.

- (b) Give **one** reason why.

.....

.....

(1)

(Total 3 marks)

24. James wants to find out how many text messages people send.

He uses this question on a questionnaire.

“How many text messages do you send?”			
<input style="width: 50px; height: 30px; border: 1px solid black;" type="text"/> 1 to 10	<input style="width: 50px; height: 30px; border: 1px solid black;" type="text"/> 11 to 20	<input style="width: 50px; height: 30px; border: 1px solid black;" type="text"/> 21 to 30	<input style="width: 50px; height: 30px; border: 1px solid black;" type="text"/> more than 30

(a) Write down **two** things wrong with this question.

- 1
-
- 2
-

(2)

James asks 10 students in his class to complete his questionnaire.

(b) Give **one** reason why this may not be a suitable sample.

-
-

(1)

(Total 3 marks)

01. (a) Responses too vague, no negative response, not exhaustive,
 no time period, not enough boxes
B1 for acceptable reason

1

- (b) Eg. How many times per month do you visit the town centre? 2
 <2 times 2 to 5 times > 5 times

*B1 for a question that includes a time period (month, week)
 OR a question with time period implied by responses
 B1 for at least 3 non-overlapping response boxes (ignore if not exhaustive)*

Do not award any marks for questions that do not have quantitative response boxes. Do not accept frequency tables, or data collection sheets.

NB: a question with the time period included with the response boxes could gain B2 eg once month, once a week, once a day, etc., since this is also quantitative.

[3]

02. (a) 2

Unbiased question with choices

*B1 for unbiased question
 B1 for at least 2 choices*

- (b) Leading question and a restricted sample 2

*Classification 1: A biased question
 Classification 2: A restricted sample of people
 Classification 3: Not specifying a range of foods
 Classification 4: Nothing to do with eating habits
 B2 reasons which satisfy 2 different classifications
 (B1 a reason which satisfies one classification)*

[4]

03. (a) Reason 1

B1 Makes some mention of bias either directly or making reference to an insufficient or biased range of responses

- (b) Reason 1

*B1 (a) an insufficient range of responses
 (b) No mention of money
 (c) No time frame in the question
 (d) Misunderstanding of "A lot" and "Not much"*

[2]

04. (a) Reason 1
B1 makes a mention of bias, either directly, or making reference to an insufficient or biased range of responses.
- (b) (i) Reason 1
B1 make some mention of any one of (a) an insufficient range of responses (b) no mention of money (c) no time frame in the question (d) misunderstanding of "a lot" or "not much"
 B2
- (ii) Question 2
B1 for each of the following upto B2
(a) an improved question eg time frame made clear (b) response boxes (imperfect) (c) response boxes no errors
 OR
For suggesting a generally improved question
(a) a question clearly in the context of changes to the canteen
(b) at least 3 boxes showing a full range of responses
- [4]**
05. Question 2
B1 for each of the following upto B2
(a) an improved question eg time frame made clear (b) response boxes (imperfect) (c) response boxes no errors
 OR
For suggesting a generally improved question
(a) a question clearly in the context of changes to the canteen
(b) at least 3 boxes showing a full range of responses
- [2]**
06. question + response
 boxes oe 2
1st aspect: One question with time period (eg each night); ignore other questions.
*2nd aspect: Response list (at least two), not overlapping.**
3rd aspect: Some mention of units (eg hours) in either question or responses
Award B2 for all three aspects, or B1 for just two aspects.
** 0 – 1, 2 – 3, 4 – 5 is OK, but 0 – 1, 1 – 2, 2 – 3 is not OK.*
- [2]**
07. (i) Eg Given responses are wrong; 'Yes' and 'No' should be replaced by 'mobile phone' and 'e-mail'
B1 for valid reason

- (ii) Eg Insufficient responses; need response box for '0' and another response box for 'more than 4' 2
B1 for valid reason

[2]

08. (a) No time period 2
 Labels too vague
B1 No time period
B1 Labels too vague

- (b) Not enough people 2
 Teachers not representative
B1 Not enough people
B1 Teachers not representative

[4]

09. (a) No time period 2
 Labels too vague
B1 No time period
B1 Labels too vague

- (b) How many pizzas have you eaten in the last week?

0	1	2	3	More than 3

- Include a time period 2
 Proper response boxes
B1 Include a time period
B1 At least 3 numeric response boxes

[4]

10. (a) How many pizzas have you eaten in the last week?

0	1	2	3	More than 3

- Include a time period 2
 Proper response boxes
B1 Include a time period
B1 At least 3 numeric response boxes

[2]

11. question + response boxes oe 2
1st aspect: One question (eg 'how long does it take you to travel to school?' or 'What time did you leave home to get to school? '); ignore other questions.
2nd aspect: Response list (at least two), not overlapping.
3rd aspect: Some mention of units (eg minutes) in either question or responses
B2 for all three aspects, or B1 for just one aspects. [2]
12. (a) 2
B1 for appropriate question, e.g. which of these vegetables do you eat?, tick the boxes of the vegetables you eat
B1 (dep) for response boxes or a list of vegetables
(condone one vegetable missing and ignore additions)
- (b) $800 \times 30/50$ 2
 480
M1 for $800 \times 30/50$ or 800×0.6 or ' $800/50$ ' $\times 30$
or $2400 \div 5$ or 60% of 800
A1 for 480 cao
(SC B1 for 480/800) [4]
13. (a) No time period
 Non-exhaustive response boxes
 Labels too vague 2
B2 for TWO aspects from: "no time period", "response boxes not exhaustive (restricted range of responses)", "Labels on response boxes are too vague"
(B1 for ONE aspect only)

- (b) How many times did you go to the cinema last month?

0	1-2	3-5	>5

Includes time period and proper response boxes

2

*B1 for inclusion of time period (this may be implied by the labels to the response boxes)**B1 for at least 3 correctly labelled response boxes (non-overlapping)**[NB: response boxes need not be exhaustive]***[4]**

14. (a)

2

*B1 'What type of magazine do you read?'**B1 for at least 2 magazines identified in response boxes**[Note: B0 for any data collection sheet/chart]*

- (b) How many magazines have you read in the last week

0	<input type="text"/>	1	<input type="text"/>
2-3	<input type="text"/>	>3	<input type="text"/>

2

*B1 Relevant question that refers to a time period.**B1 for at least 3 mutually exclusive response boxes (need not be exhaustive)***[4]**

15. Question

2

*B2 for appropriate question AND exhaustive non-overlapping response boxes indicating money**[B1 for one of the above]**OR B1 for a question clearly relating to the changes made in the canteen**B1 For at least 3 boxes showing a full range of responses***[2]**

16. overlapping boxes

1

*B1 for overlapping boxes or for example, 30 is in 2 places or 21 – 30, 31 – 40 etc.***[1]**

17. Reference to time
Non-overlapping
Non-exhaustive 2
B1 for period of time mentioned (eg per week)
B1 for response boxes not exhaustive [2]
18. No time period
Labels too vague 2
B1 No time period
B1 Labels too vague [2]
19. 2 reasons 2
B1 no time frame
B1 overlapping regions [2]
20. 2 reasons 2
B1 eg only women asked or you need to ask men
B1 eg only leaving a cinema or needs to be different places [2]
21. e.g. How many times each week do you shop at this supermarket?
0, 1, 2, 3, 4 or more 2
B1 for an appropriate question with a reference to a time period
OR a question with time period implied by responses.
B1 for at least 3 non-overlapping boxes (ignore if not exhaustive)
Do not accept frequency tables or data collection sheets. [2]

22. Overlapping intervals
No time period
No 6+ response box 2
B2 for two correct
(B1 for one correct) [2]
23. (a) Overlapping intervals
Time frame
No 6+ (or none) 2
B2 for 2 correct
(B1 for 1 correct)
- (b) Not representative of all ages
Students use computers more 1
B1 for one acceptable reason [3]
24. (a) No time period
No response box for 0
Need smaller class intervals 2
B2 for 2 of the 3 reasons
(B1 for 1 reason)
- (b) Comment on sample 1
B1 for sample too small
or all same age group
or same gender [3]

01. Nearly all candidates were able to identify a weakness of the given question in part (a). The second part was less structured, and candidates had to give their answer more thought, which caused many to provide questions which were unsuitable.

The better answers referred to weekly visits, giving a range of non-overlapping numbers. An acceptable alternative was a set of boxes referring to daily, weekly, monthly, etc. Weaker candidates gave less well-defined boxes, using terms such as “often”, “frequent”, etc., which was inappropriate. Centres also need to be aware that use of inequalities in response boxes is unsuitable for a questionnaire.

02. Paper 3

Part (a) asked for a question that was to be part of a questionnaire. Questionnaires do *not* include tally charts or data collection tables for several individuals, yet many candidates appear to think that they do. Centres are advised to ensure that candidates understand the difference between techniques for collecting data from several individuals, and those (as in questionnaires) for just one individual. Many candidates gave appropriate responses to their chosen question, which was then credited. In part (b) candidates gave wide-ranging reasons, most of them relating to the context. Unfortunately many candidates merely repeated their first reason for the second reason, if only by changing the wording slightly.

Paper 5

In part (a), although many candidates provided a valid question and many of those also gave a list of relevant choices, a significant minority saw this part of the question as a data collection exercise. In part (b) the vast majority of candidates scored at least one of the two marks. Those who failed to gain the second mark normally gave more information based on their first reason rather than providing a second reason.

- 03.** Candidates are clearly more familiar now with this type of question and a wide range of sensible answers was accepted.
- 04.** Most candidates were able to get some credit from this question, though inevitably poor language caused problems for some. Whilst attempts are made to take this into account, it is always a balance between giving compensation where possible, and not accepting ambiguity which could lead to marks being awarded inappropriately. In part (a) candidates were quick to identify bias, or severe restrictions in the options available to them in the question. Common errors included reference to process (tally charts) or indications that the question was “open”, without specifying why. In part (b) most candidates’ answers inferred that there was still a restricted range of responses, that specific references to money is needed, that “a lot” means different things to different people, or that there was no reference to a time period. Other appropriate answers also gained the mark. In suggesting improvements most candidates improved the response boxes. Many candidates suggested ranges in money, but few gave boxes which did not overlap. A significant number of candidates gave answers which related to the question in part (a); where their suggestions made a real improvement to that question, credit was also given. Overall candidates are far more aware of problems with questionnaires, and the majority of candidates scored well on this question.

05. Successful candidates generally interpreted the question in one of two ways. One group considered the money aspect and improved the question by giving a suitable time period – for example, ‘at lunchtime’. The other group focussed on the effect of the changes and substituted a new question along the lines of ‘What do you think of the changes in the canteen?’ The first group improved their response boxes by giving a set of which gave a range of monetary choices. Very few, however, gave a set that was both exhaustive and non-overlapping. The second group improved the response boxes by typically including 3 of them, one positive, one negative and one neutral.

06. Specification A

Higher Tier

In this question candidates were expected to give two things- a question with a time period, such as ‘each night’, and a response section with a choice for the number of hours of sleep. Most candidates were able to give a suitable question but many lost a mark when their response section had ill defined, or overlapping, categories. When used, even some of the best candidates struggled to define their categories with a correct application of the inequality notation- a typical example was $6 < 7$.

Intermediate Tier

Most candidates gave a question which related to a clear time period. Response boxes, or a list of responses (sometimes in a table) were frequently given, but some had overlapping intervals. A few candidates tried to use inequalities to express their intervals, but spoiled these in the process. A significant minority of candidates gave a number of questions to find out what time the respondent went to bed, and what time they got up, but these questions could not be used directly to find out the amount of sleep, which is what the question on the paper was referring to.

Specification B

The majority of candidates were able to ask a sensible question that included a time period and specified the units to be used. There were some unsuitable questions given which would not have obtained the required information. The most common of these was ‘What time do you go to bed?’ There was less success of providing suitable response boxes; these frequently overlapped.

07. Many candidates put forward good reasons as to why the questions were not suitable. In part (i) many identified that the yes/no response boxes were not appropriate or commented that there should be provision for other means of communication. The most common responses in part (ii) referred to there being no provision for 0 or more than 4 email addresses.

08. 70% of candidates were able to provide one thing that was wrong with the question in (a), generally for noticing that the given options were too vague. Others commented on the grammar used in the question, often stating that it should say ‘ate’ not ‘eaten’. However only around 10% of the candidates recognised that the question did not provide a time period. In part (b) many of the candidates provided responses that related to part (a). Others commented that teachers might not eat pizza. One candidate wrote ‘Teachers do not eat. They only feed on the happiness they drain from children’! Others had more sympathy with teachers’ plight and mentioned that teachers were always marking and had no time to go out or eat healthily! Fewer than 30% of the candidates recognised that not enough people received the questionnaire and that teachers were not representative of the population as a whole.

09. **Specification A**

Part (b) was frequently better answered than (a), with a clear question and good set of response boxes. Candidates did not always apply their own principles attached to having a good question to their critique of the given question in part (a). Many candidates in part (a) included a reference to the inadequacy of the response boxes, but better answers also referred to the need for a stated time period. In part (b) the most common error was to give overlapping response boxes, but this was less common than in previous years. Data collection tables and tally tables received no marks.

Specification B

In part (a) many candidates scored at least one mark for commenting on the “vagueness” of the given responses. Fewer explicitly mentioned the absence of a time period but then went on, in part (b) to improve the question by quoting a period of time. In part (b) marks were often lost because of overlapping amounts quoted in the response boxes. A number tried to produce a capture sheet based on data collection and typically tallies, with no question being posed. These scored no marks.

10. **Specification A**

There was a significant improvement in the response to this question compared to a similar one last year. Most candidates recognised the need to include a time period somewhere in their question (with the question or with the response boxes). Generally response boxes were non-overlapping, but the use of the correct notation for grouped intervals is still causing a problem for many. Candidates using simple notation, such as: 0 1 2 3 more than 3, were more likely to score full marks than those attempting grouped intervals.

Specification B

Many candidates were aware of the need to include a time period in their question in order to improve the original question. Candidates frequently did not gain the mark available for the response boxes as a result of having values that overlapped. Some candidates misinterpreted the question and drew a data collection table instead of an improved question with response boxes. Those candidates who kept their response boxes simple were more likely to gain the mark available for the response boxes; inequality signs, if used, were frequently used incorrectly.

11. Virtually all candidates were able to score at least 1 mark in this question. Most provided a suitable question for the questionnaire but answer boxes were often ill defined, e.g. with overlapping intervals or with the absence of units.
12. Part (a) was generally done very well. Most candidates realised that they had to provide both a question and a response section. A small number of candidates did not provide a question but gave instructions on how to complete the response section and/or gave incorrectly a tally chart for their response section.

In part (b), the majority of candidates knew that they were required to find $\frac{30}{50} \times 800$, but many were unable to do this accurately. Common errors were $800 \div 50 = 14$ and $16 \times 30 = 420$ or 540 or 580.

13. Foundation

This question was well done by candidates of all abilities. Most could give a reasonably clear response and gain at least one mark for a valid criticism in part (a). This was usually the need for a time period, more clearly defined response boxes or the absence of a box for people who never go to the cinema. The design of a better question was also well done. Some candidates gave overlapping response boxes and sometimes candidates designed a data collection sheet rather than a question. However, these were seen less frequently than in the past. Over 70% of candidates scored at least 1 mark in each part of this question.

Higher

Very few candidates failed to score any marks in this question. In part (a) most were awarded at least one mark for recognising that the response boxes were not really fit for purpose, although the level of explanation was often poor. Usually the second mark was then awarded for realising that a time frame was needed. Candidates who failed to score maximum marks in (a) often recovered to gain full marks in part (b). Overlapping response boxes was the usual reason for loss of marks in this part.

14. Foundation

Most candidates were able to gain some marks in this question. Often the loss of marks reflected the lack of comprehension or carelessness in reading the question. Some gave answers to part (a) in part (b) and to a lesser degree vice versa. In part (a), many candidates asked a suitable question but failed to give response boxes for the alternative replies.

In part (b), failure to quote a time period or giving over-lapping response boxes were the main reasons why marks were not awarded.

Candidates should ask themselves the question "Could I put my tick in more than one box?" If the answer is 'yes' then the response boxes are over-lapping and therefore need correcting.

Many candidates mixed up their responses to 28(a) and (b) or tried to combine them into a longer series of questions.

Higher

Part (a) caused little difficulty, with most candidates gaining full marks for a suitable question with response boxes. When marks were lost it was usually because candidates omitted response boxes or produced a tally chart instead. In part (b) many candidates failed to realise that there were two ways in which the question could be improved. Firstly, many did not give a time period in their question, although some did include this in their responses. Secondly, the response boxes were sometimes too vague or, more commonly, the options were not mutually exclusive.

15. The majority of candidates gained at least one mark on this question, particularly those who related their question to the changes made in the canteen. At least 3 response boxes were required with each question offered. The response boxes for amounts of money often lost marks for either overlapping amounts or for the amounts not being exhaustive.
16. This question was not well done with many candidates not spotting the overlapping nature of the response box labels. Many who did spot this contradicted themselves by saying that those aged 20 would have two places to respond. The majority of correct answers referred to the fact that the ranges of ages should have been written as 31 – 40, 41 – 50, etc. or 20 – 29, 30 – 39, etc. Vague responses which failed to gain credit included making reference to the fact that the question did not make sense or that it was wrong (too personal) to ask for ages or that the ranges of ages given were too broad.

17. Foundation Tier

Over half the candidates scored a mark for commenting on the non-exhaustive boxes but then failed to mention the time element. Answers usually went along the lines of ‘magazines could cost £1.50’, ‘it may cost more than £3’, ‘they might not buy a magazine’, etc, all scoring one mark. Others tried to say that the question was badly worded or commented on the punctuation or focused on the word ‘teenagers’ and whether they were male or female, all of which scored no marks. Candidates should be discouraged from using “text talk” as it was not uncommon to see ‘no 1’ for ‘no one’, ‘so u can’ and ‘enuf’.

Intermediate Tier

Many recognised the inadequacies of the response boxes, not being exhaustive, to earn one mark but failed to recognise the need for a time frame in which to relate this question.

18. It was heartening to see about three quarters of candidates recognising that the responses “A few” and “A lot” were too vague. They earned one mark for this. A much smaller proportion realised the need for a specified time period to feature in the question. Some candidates gave “stock” answers such as “the question is biased”. Such answers could not be awarded any credit.
19. The majority of candidates scored at least one mark for their answer to this question either citing the need to give a time frame or to avoid overlapping categories for the number of text messages. However, it was not usual for candidates to give both of these. Many candidates related the need to have smaller groups or more groups to cover a larger number of text messages.
20. This question allowed candidates to be creative in their answers and 47% of them seized the opportunity and gained two marks. There were, of course, many candidates who had good ideas and were able to write them intelligibly. They were able to point out that having only women in a sample would make it biased (Many wrote that men and women may well have different cinema going habits). They were also able to remark on the fact that the people interviewed leaving the cinema must already have been to the cinema at least once. 90% of all candidates were able to score at least 1 mark, usually for identifying that only women were asked, they found it harder to identify that the location was important as well.

21. Foundation

60% of candidates scored at least one mark for either giving a question with a time frame or for giving at least 3 non-overlapping response boxes. About 2 in every 3 of these candidates scored both marks.

Despite there being several similar questions on recent examination papers, there were still a substantial number of candidates who drew up a data collection sheet or frequency table. Vague labels for the response boxes – for example “rarely”, “quite often”, “often” and “very often” were commonly seen.

Higher

This question was answered well with 76% of candidates securing both marks. The main errors seen included overlapping response boxes and questions which did not focus on asking “how often people shop at Valerie’s supermarket”. Data collection sheets were seen frequently and received no credit. The most successful answers centred upon a simple set of response boxes such as “0-2, 3-4, 5-6”, etc, rather than wordy ones. Some responses seemed to allow for the possibility of the shopper visiting the supermarket many times each day. Students should be discouraged from using inequality signs in a question which requires a discrete answer.

22. Most candidates were able to score at least one mark in this question, usually for identifying the overlapping intervals. Another popular response was to identify in some way that there was not a box for more than 6 hours, e.g. “no other box”, or a box for no computer, e.g. “they may not have a computer”. A small number of candidates thought, incorrectly, that there was a problem with the grammar of the question, or with the presentation of the boxes.

23. In part (a), most candidates were able to score at least one mark in this question, usually for identifying the overlapping intervals. Another popular response was to identify in some way that there was not a box for more than 6 hours, e.g. “no other box”, or a box for no computer, e.g. “they may not have a computer”. A small number of candidates thought, incorrectly, that there was a problem with the grammar of the question, or with the presentation of the boxes.

In part (b), about a third of the candidates were able to identify why her sample was biased. Many simply repeated one of the reasons they gave in part (a), typically ‘they may not have a computer’, or where too, e.g. ‘she only asked the people in her class.’

21. Foundation

Around 80% of the candidates were able to score at least one mark on this question. Around 12% of the candidates were able to provide two valid things wrong with the question and give a suitable reason why the sample was not suitable whilst around 30% scored a total of 2 marks. The two most commonly identified things wrong with this question were the lack of a time period and not having a box for zero clearly stated. These were described in various ways but nevertheless reward was given for recognition of these two facts. Many spotted that the number 30 was involved in two option boxes and therefore gave the criticism that there were overlapping regions, clearly not understanding the implication of the words ‘more than 30’. Credit was also given to those candidates who identified that the range within each box was too wide.

Part (b) was asking about a ‘suitable sample’ but most responses were still focusing on ‘two things wrong with this question’ from part (a). Thus it became simply a repeat of the answer for the first part slightly re-worded. Concentrating on sample size, age group or gender should have provided an easier base to frame the answer about the sample. Many candidates thought that James’ sample could not include people that he knew.

Higher

Virtually all the candidates were able to score at least one mark on this question. Around half the candidates were able to provide two valid things wrong with the question and give a suitable reason why the sample was not suitable whilst around 80% scored a total of 2 marks. The two things wrong with this question were often correctly identified with the lack of a time period and not having a box for zero clearly stated. These were described in various ways but nevertheless reward was given for recognition of these two facts. Many spotted that the number 30 was involved in two option boxes and therefore gave the criticism that there were overlapping regions, clearly not understanding the implication of the words 'more than 30'. The word 'specific', with all its spelling variations, also featured but did not identify precisely what it referred to. Credit was also given to those candidates who identified that the range within each box was too wide. Candidates appeared to have been taught to respond with 'biased', 'leading' or 'too personal' which was not appropriate in this case.

Part (b) was asking about a 'suitable sample' but many responses were still focussing on 'two things wrong with this question' from part (a) thus it became simply a repeat of the answer for the first part slightly re-worded. Concentrating on sample size, age group or gender should have provided an easier base to frame the answer about the sample. Many candidates thought that James' sample could not include people that he knew. In both parts, concise answers often scored better than long explanations, which often lead to choice or ambiguity.