



S16-10min Grouped Frequency Tables: 10-minute Pack

EDEXCEL 1ST0 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** A museum recorded the age, in years, of 32 visitors one afternoon. The grouped frequency table shows the results.

Age (years)	Frequency
$0 < a \leq 20$	9
$20 < a \leq 40$	13
$40 < a \leq 60$	7
$60 < a \leq 80$	3
Total	32

- (a) Write down the modal class. (1)

.....

- (b) Write down the frequency of the class $40 < a \leq 60$. (1)

.....

- (c) Work out the total number of visitors in the classes $0 < a \leq 20$ and $20 < a \leq 40$ combined. (2)

.....

- (d) Work out the percentage of the 32 visitors who were over 40 years old. (2)

.....

(Total for Question 1 is 6 marks)

- 2 The grouped frequency table shows the rainfall, in mm, recorded over 40 days.

Rainfall (mm)	Frequency
$0 < r \leq 5$	9
$5 < r \leq 10$	14
$10 < r \leq 15$	10
$15 < r \leq 20$	7
Total	40

- (a) Complete a cumulative frequency column for this table.

(2)

Rainfall (mm)	Frequency	Cumulative frequency
$0 < r \leq 5$	9	
$5 < r \leq 10$	14	
$10 < r \leq 15$	10	
$15 < r \leq 20$	7	

- (b) Write down the number of days with rainfall of 10 mm or less.

(1)

- (c) Work out the number of days with rainfall of more than 10 mm.

(2)

(Total for Question 2 is 5 marks)

Mark scheme · S16-10min Grouped Frequency Tables: 10-minute Pack

Question 1

- (a) **B1** $20 < a \leq 40$ cao
- (a) **Answer: $20 < a \leq 40$**
- (b) **B1** 7 cao
- (b) **Answer: 7**
- (c) **M1** $9 + 13$, oe
- (c) **A1** 22 cao
- (c) **Answer: 22**
- (d) **M1** $(7 + 3) / 32 \times 100$, oe
- (d) **A1** 31.25% cao (accept 31.3%)
- (d) **Answer: 31.25%**

Question 2

- (a) **B1** at least two of the four cumulative frequencies correct
- (a) **B1** all four cumulative frequencies correct: 9, 23, 33, 40
- (a) **Answer: 9, 23, 33, 40**
- (b) **B1** 23 cao
- (b) **Answer: 23**
- (c) **M1** $40 - 23$, oe
- (c) **A1** 17 cao
- (c) **Answer: 17**