GCSE Exam Questions

Grouped Frequency Table | Statistics

GCSE Exam Questions: Grouped Frequency Table

1) Adil carried out a survey to find the number of

emails sent by 20 of his friends yesterday.

Here are the results:

4	22	27	32	11
35	40	13	39	18
28	5	12	42	25
17	25	45	38	8

Complete the grouped frequency table:

Number of emails	Tally	Frequency
0 - 9		
10 - 19		
20 - 29		
30 - 39		
40 - 49		

(2 marks)

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GCSE Exam Questions: Grouped Frequency Table

2) (a) Charlie asked 20 people how long in minutes they spent doing their English homework.

Here are their results.

58	19	30	25	37
27	25	35	45	37
48	42	30	49	28
35	14	20	32	37

Complete the grouped frequency table:

Time, t minutes	Tally	Frequency
$0 < t \leq 15$		
$15 < t \leq 30$		
$30 < t \leq 45$		
$45 < t \leq 60$		

(2)

(b) What percentage of people spent half an hour or less on English homework?

-----------------------%

(2)

(4 marks)

GCSE Exam Questions: Grouped Frequency Table

3) **(a)** Roshan is surveying the heights of 20 tomato plants.

She measures them to the nearest centimetre.

Here are the results in metres

1.26	1.42	1.75	1.03	1.28
1.15	1.28	1.09	1.80	1.59
1.92	1.44	1.38	1.55	1.62
1.64	1.79	1.91	1.73	1.52

Complete the grouped frequency table:

Height, h (m)	Tally	Frequency
$1.00 < h \leq 1.25$		
$1.25 < h \leq 1.50$		
$1.50 < h \leq 1.75$		
$1.75 < h \leq 2.00$		

(2)

(b) What percentage of tomato plants are more than 125 cm tall?

------------------------%

(2)

(4 marks)

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GCSE Exam Questions: Grouped Frequency Table Answers

	Question	Answer	Marks
1)	Adil carried out a survey to find the number of emails sent by 20 of his friends yesterday. Here are the results: 4 22 27 32 11 35 40 13 39 18 28 5 12 42 25 17 25 45 38 8 Complete the grouped frequency table: <table><tr><th>Number of emails</th><th>Tally</th><th>Frequency</th></tr><tr><td>0 - 9</td><td></td><td></td></tr><tr><td>10 - 19</td><td></td><td></td></tr><tr><td>20 - 29</td><td></td><td></td></tr><tr><td>30 - 39</td><td></td><td></td></tr><tr><td>40 - 49</td><td></td><td></td></tr></table>	<table><tr><th>Number of emails</th><th>Tally</th><th>Frequency</th></tr><tr><td>0 - 9</td><td>|||</td><td>3</td></tr><tr><td>10 - 19</td><td>卌</td><td>5</td></tr><tr><td>20 - 29</td><td>卌</td><td>5</td></tr><tr><td>30 - 39</td><td>||||</td><td>4</td></tr><tr><td>40 - 49</td><td>|||</td><td>3</td></tr></table> For at least one correct tally or frequency For all frequencies correct	**(1)** **(1)**
2) (a)	Charlie asked 20 people how long in minutes they spent doing their English homework. Here are their results. <table><tr><td>58</td><td>19</td><td>30</td><td>25</td><td>37</td></tr><tr><td>27</td><td>25</td><td>35</td><td>45</td><td>37</td></tr><tr><td>48</td><td>42</td><td>30</td><td>49</td><td>28</td></tr><tr><td>35</td><td>14</td><td>20</td><td>32</td><td>37</td></tr></table> Complete the grouped frequency table: <table><tr><th>Time, t minutes</th><th>Tally</th><th>Frequency</th></tr><tr><td>$0 < t \leq 15$</td><td></td><td></td></tr><tr><td>$15 < t \leq 30$</td><td></td><td></td></tr><tr><td>$30 < t \leq 45$</td><td></td><td></td></tr><tr><td>$45 < t \leq 60$</td><td></td><td></td></tr></table>	**(a)** <table><tr><th>Time, t minutes</th><th>Tally</th><th>Frequency</th></tr><tr><td>$0 < t \leq 25$</td><td>|</td><td>1</td></tr><tr><td>$15 < t \leq 30$</td><td>卌 |||</td><td>8</td></tr><tr><td>$30 < t \leq 45$</td><td>卌 |||</td><td>8</td></tr><tr><td>$45 < t \leq 60$</td><td>|||</td><td>3</td></tr></table> For at least one correct tally or frequency For all frequencies correct	**(1)** **(1)**
(b)	What percentage of people spent half an hour or less on English homework?	**(b)** $\dfrac{1 + 8}{20} \times 100$ $= 45\%$	**(1)**

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GCSE Exam Questions: Grouped Frequency Table Answers

	Question	Answer	Marks
3) (a)	Roshan is surveying the heights of 20 tomato plants. She measures them to the nearest centimetre. Here are the results in metres 1.26 1.42 1.75 1.03 1.28 1.15 1.28 1.09 1.80 1.59 1.92 1.44 1.38 1.55 1.62 1.64 1.79 1.91 1.73 1.52 Complete the grouped frequency table: | Height, h (m)	Tally	Frequency
---	---	---
$1.00 < h \le 1.25$		
$1.25 < h \le 1.50$		
$1.50 < h \le 1.75$		
$1.75 < h \le 2.00$				**(a)** | Height, h (m)	Tally	Frequency
---	---	---
$1.00 < h \le 1.25$	|||	3
$1.25 < h \le 1.50$	卌 |	6
$1.50 < h \le 1.75$	卌 ||	7
$1.75 < h \le 2.00$	||||	4 | For at least one correct tally or frequency For all frequencies correct	**(1)** **(1)**
(b)	What percentage of tomato plants are more than $125cm$ tall?	**(b)** $\dfrac{6 + 7 + 4}{20} \times 100$ $= 85\%$	**(1)** **(1)**

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