

# JU CHING CHU SECONDARY SCHOOL (T. M.)

## MATHEMATICS QUIZ - 1

(STATISTICS 統計學)

1. The following data are marks of 45 pupils in a mathematics test.  
下列數據為 45 個學生於數學測驗的成績。

77 53 41 56 30 69 56 62 54  
49 47 82 60 67 40 73 55 46  
57 65 60 46 59 48 68 56 35  
62 49 75 54 81 74 43 66 59  
44 63 52 66 39 52 50 57 43

- (a) Group the data into the following frequency table:  
完成下表：

<b>Marks 成績</b>	<b>30 - 39</b>	<b>40 - 49</b>	<b>50 - 59</b>	<b>60 - 69</b>	<b>70 - 79</b>	<b>80 - 89</b>
<b>Frequency 頻數</b>						

- (b) What is the class width of each class?  
每組的組距為多少？
- (c) What is the class mark of the third class?  
第三組的組中點為多少？
- (d) What are the class boundaries of the fourth class?  
第四組的組界為多少？

2. The lengths of 40 rods in cm are as follows:  
下列數據為 40 條木棒的長度，準確至最接近的 cm。

22.9 23.7 24.4 24.6 24.2 24.1 24.2 24.1  
23.0 23.9 24.2 24.1 23.9 23.3 25.6 24.1  
23.4 24.5 25.1 24.0 24.9 24.0 24.4 24.4  
24.8 25.0 23.1 24.3 24.6 22.8 24.5 24.2  
23.5 24.7 24.5 23.9 23.9 24.2 23.4 23.6

- (a) Group the data into the following frequency table:  
完成下表：

<b>Length 長度</b>	<b>22.8- 23.2</b>	<b>23.3- 23.7</b>	<b>23.8- 24.2</b>	<b>24.3- 24.7</b>	<b>24.8- 25.2</b>	<b>25.3- 25.7</b>
<b>Frequency 頻數</b>						

- (b) Draw the corresponding histogram.  
繪出相應的直方圖。
- (c) Draw the corresponding frequency polygon over the histogram.  
於直方圖上繪出相應的頻數多邊形。

3. The distribution of the aptitude test scores of 150 applicants for a job are as follows:

下表所示為 150 個申請者的性向測驗的結果分佈。

<b>Scores 得分</b>	<b>20 - 29</b>	<b>30 - 39</b>	<b>40 - 49</b>	<b>50 - 59</b>	<b>60 - 69</b>	<b>70 - 79</b>	<b>80 - 89</b>	<b>90 - 99</b>
<b>Frequency 頻數</b>	<b>5</b>	<b>12</b>	<b>31</b>	<b>42</b>	<b>32</b>	<b>16</b>	<b>10</b>	<b>2</b>

- (a) Draw the cumulative frequency polygon for the distribution.  
繪出此分佈的累積頻數多邊形。
- (b) How many applicants got scores more than 75?  
得分高過 75 分的申請者有多少人？
- (c) There are 15 vacancies for the job and the ones score the highest got the job. What is the minimum score to get the job?  
現有 15 個空缺，而得分最高的申請者將獲得此職位。問獲得此職位最少為多少分？

# JU CHING CHU SECONDARY SCHOOL (T. M.)

## MATHEMATICS QUIZ - 2

(STATISTICS 統計學)

1. A boy tossed 6 coins at a time for 100 times. The number of heads turned up in each toss is noted and grouped as follows:  
現有一男孩同一時間擲 6 個硬幣 100 次，下表記錄「公」的數目出現的次數。

No. of heads 「公」的數目	0	1	2	3	4	5	6
Frequency 頻數	1	7	25	31	23	10	3

Find the mean, mode & median.

求「公」的數目的算術平均數，眾數及中位數。

2. (a) The marks of 10 boys in a test were as follows:  
下列數據為 10 個男孩於某次測驗的成績。

65, 32, 47, 75, 90, 58, 61, 72, 43, 69.

Find the range & interquartile range.

求成績的分佈域及四分位數間距。

- (b) If 5 marks are added to each marks of the boys, find the new range & interquartile range.

若每一男孩的成績均被加 5 分，求新的分佈域及四分位數間距。

3. The amounts in the savings accounts of 250 pupils are as follows:  
下表為 250 個學生的儲蓄存款總數。

Amounts(\$) 存款總數	1 - 100	101 - 200	201 - 300	301 - 400	401 - 500
Frequency 頻數	20	75	80	60	15

- (a) Draw the cumulative frequency polygon.

繪出存款總數的累積頻數多邊形。

- (b) Hence find the interquartile range.

由此求四分位數間距。

4. The table below shows the I.Q. of 50 pupils in a school.  
下表為 50 個學生的 I.Q.。

I.Q.	75 - 85	85 - 95	95 - 105	105 - 115	115 - 125	125 - 135
No. of pupils 學生人數	2	4	18	20	5	1

Calculate the mean, standard deviation & mean deviation.

計算學生的 I.Q.的算術平均數，標準差及平均偏差。