**Students' Work**

Lesson Worksheet **Set 1 Q4**

Why did the bus operator show the claimed average rate of increase?

It is because the claimed average rate of increase is smaller than the inflation rate of the previous year.

$$4.9\% < 5.1\%$$

However, the weight mean base on the total income of the route is greater than the inflation rate of the previous year.

$$6.06\% > 5.1\%$$

The bus operator misleads the people.

Lesson Worksheet **Set 2 Q6**

Do you think the weighing system is fair? Describe the pros and cons of the system.

No because if a student does not have any elder brothers or sisters, he or she will lose a lot of marks so there is a less chance for him or her to study in the school. If the student's parents did not study in the school before, he or she will also lose a lot of mark. This two item cannot be changed and it is determined so it is unfair for students who can't match the two standard which contains 60% of the mark. However,

Lesson Worksheet **Set 3 Q5** and **Q6**

If Jacky can spend 50 more hours in total in studying, which subject(s) should he study now in order to increase the chance of getting his favourite subject combination? Explain your answer.

If he spend all the time to study Mths / Chi / Eng
Increase in overall
$= \frac{125}{22} \times 0.7 + 0 \times 0.3 = 3.98$ marks.

If Phy / Chm / Bio
Increase in overall
$= \frac{25}{22} \times 0.7 + \frac{25}{3} \times 0.3 = 3.30$ marks

∴ $3.98 > 3.30$
So he should use all the time to study Chi / Mth / Eng because it has an overall higher weight.

In real life, what factors affect the study time spent on each subject for a S3 student?

1. My interest in the subject
2. Goal of getting more ~~high~~ marks.

Lesson Worksheet **Set 4 Q3** and **Q4**

What are the factors that would affect the number of customers?

Weather condition
Holiday
Transport
New shop (attract their business)

Is the method good? Are there any suggestions for the restaurant? Explain your answer.

No.
Let the situations :
weather is bad → -50%
Today is holiday → +30%
No traffic jam → +20%
New shop doesn't open → +40%