

# Family average monthly expenditure essay



**ASSIGN  
BUSTER**

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We students taking Additional Mathematics are required to carry out a project work while we are in Form 5. This year the Curriculum Development Division, Ministry of Education has prepared tasks for us . We are to choose and complete only ONE task based on our area of interest.. Upon completion of the Additional Mathematics Project Work , we are to gain valuable experiences and able to:

- \* Apply and adapt a variety of problem solving strategies to solve routine and non-routine problems.
- \* Experience classroom environments which are challenging, interesting and meaningful and hence improve their thinking skills.
- \* Experience classroom environments where knowledge and skills are applied in meaningful ways in solving real-life problems.

- \* Experience classroom environments where expressing ones mathematical thinking, reasoning and communication are highly encouraged and expected.
- \* Experience class room environments that stimulates and enhances effective learning.
- \* Acquire effective mathematical communication through oral and writing , and to use the language of mathematics to express mathematical ideas correctly and precisely.
- \* Enhance acquisition of mathematical knowledge and skills through problem-solving in ways that increase interest and confidence.
- \* Prepare ourselves for the demand of our future undertakings and in work place.
- \* Realize that mathematics is an important and powerful tool in solving real-life problems and hence develop positive attitude towards mathematics.
- \* Train ourselves not only to be independent learners but also to collaborate, to cooperate, and to share knowledge in an engaging and healthy environment
- \* Use technology especially the ICT appropriately and effectively.
- \* Train ourselves to appreciate the intrinsic values of mathematics and to become more creative and innovative.
- \* Realize the importance and the beauty of mathematics.

- \* Give a description for price index, weightage and composite index.
- \* State four ways of weightage representations.
- \* Compare my family's average monthly expenditure for the year 2013 and the selected year .
- \* Calculate the percentage of each item of my family's expenditure.
- \* Calculate the composite index for my family's average monthly expenditure in the year 2013 based on the selected year
- \* Make a conclusion about my family's expenditure based on information gathered.
- \* Find information on the price of television if payment is by cash and by installment for two different brands in three different shops.
- \* Choose a brand and a size television that I want to buy based on the information collected and give reasons for my decision.
- \* Determine the shop that deserves to win the award for fair price by considering the value of the mean and the value of standard deviation in the decision making.
- \* Show my family's modified average monthly expenditure in order to buy a television.
- \* Show the planning of my expenditure if my salary was RM 6000 monthly.
- \* Reflect on what I have learned while conducting the project.

Based on my early stage investigation, I would say that my family's average monthly expenditure is increasing by the year. This could be seen as the difference between this year's average monthly expenditure and the past years are very big. It is big as the years come as the prices of items are increasing gradually. When the prices of items increases, the average monthly average expenditure also increases. For example when the price of petroleum increases, the expenditure will also increases. This phenomena of price hiking will be continuing as time goes by.

Index numbers are meant to study the change in the effects of such factors which cannot be measured directly. According to Bowley , Index numbers are used to measure the changes in some quantity which we cannot observe directly'. For example, changes in business activity in a country are not capable of direct measurement but it is possible to study relative changes in business activity by studying the variations in the values of some such factors which affect business activity, and which are capable of direct measurement.

Index numbers are commonly used statistical device for measuring the combined fluctuations in a group related variables. If we wish to compare the price level of consumer items today with that prevalent ten years ago, we are not interested in comparing the prices of only one item, but in comparing some sort of average price levels. We may wish to compare the present agricultural production or industrial production with that at the time of independence. Here again, we have to consider all items of production and each item may have undergone a different fractional increase (or even a decrease). How do we obtain a composite measure.

This composite measure is provided by index numbers which may be defined as a device for combining the variations that have come in a group of related variables over a period of time, with a view to obtaining a figure that represents the result of the change in the constituent variables. Index numbers may be classified in terms of the variables that they are intended to measure. In business, different groups of variables in the measurement of which index number techniques are commonly used are (i) price, (ii) quantity, (iii) value and (iv) business activity.

Thus, we have index of wholesale prices, index of consumer prices, index of industrial output, index of value of exports and index of business activity, etc. Here we shall be mainly interested in index numbers of prices showing changes with respect to time, although methods described can be applied to other cases. In general, the present level of prices is compared with the level of prices in the past. The present period is called the current period and some period in the past is called the base period.