

Year 10 Math Assessment - Social Action Fundraiser 2024

Assessment description

The Executive Council is doing a fundraiser for Middlemore Hospital. Water Whanau Y10 students will sell Hangi during lunchtime as a fundraiser to support Mrs Naidoo and the Executive Council. Given below is the recipe and cost for two people.

Hangi Recipe Serving size:2

- 500g Meat per person (chicken, pork seasoned with salt) \$5.00
- 1 shopping bag of Watercress. \$2.00
- 1 potato per person. \$0.50
- 1 piece of pumpkin per person \$0.75
- 1 kūmara per person. \$1.20
- Rongoa rākau - mix of whatever you can find (Kawakawa, Harakeke, Manuka, Pūhā, Koromiko, karamu, Watakirihī) \$2.00

You are to calculate the following things in order to complete the assessment successfully.

- *Quantity of each ingredient required for 50 servings*
- *Price for each ingredient based on 50 servings*
- *Calculate the cost to prepare 50 servings*
- *Based on the above calculations, what would be the cost price for one serving?*
- *If you are planning to make a profit of 20% , What would be the selling price for one serving (excluding GST)?*
- *Other than the price of the ingredients, What other things would you consider before deciding on the selling price?*
- *Based on a GST of 15%, How much GST would you pay on 1 serving?*
- *What would be the selling price for one serving including GST?*
- *Discuss different ways in which you can reduce the cost and increase profit.*

I know that :

- Decimals can be terminating, repeating and infinite, or non-repeating and infinite (irrational numbers).
- There are an infinite number of rational numbers between any two numbers.
- Multiplying a fraction by an equivalent form of 1 (e.g., $\frac{3}{3}$) results in an equivalent fraction.
- For positive numbers, dividing by a divisor between 0 and 1 gives a result bigger than the dividend.
- A rate compares two quantities that have different units of measure. A ratio is a comparison of two like quantities.

Criteria	Working TOWARDS	Working AT	Working ABOVE	Working BEYOND
Fraction Arithmetic, Percentages and Decimals	You have shown some understanding of <i>solving number problems involving fraction arithmetic, percentages and decimals</i> on [Context]	You have shown an understanding of <i>solving number problems involving fraction arithmetic, percentages and decimals</i> on [Context]	You have shown a strong understanding of <i>solving number problems involving fraction arithmetic, percentages and decimals</i> on [Context]	You have shown a comprehensive understanding of <i>solving number problems involving fraction arithmetic, percentages and decimals</i> in [Context]
Integers	You have shown some understanding of solving number problems involving multiplying and dividing integers on [Context]	You have shown an understanding of solving number problems involving multiplying and dividing integers on [Context]	You have shown a strong understanding of solving number problems involving multiplying and dividing integers on [Context]	You have shown a comprehensive understanding of solving number problems involving multiplying and dividing integers in [Context]
Rates	You have shown some understanding of <i>using rates to model and represent change</i> on [Context]	You have shown an understanding of <i>using rates to model and represent change</i> on [Context]	You have shown a strong understanding of <i>using rates to model and represent change</i> on [Context]	You have shown a comprehensive understanding of <i>using rates to model and represent change</i> in [Context]
Ratio	You have shown some understanding of <i>applying ratios to model everyday situations</i> on [Context]	You have shown an understanding of <i>applying ratios to model everyday situations</i> on [Context]	You have shown a strong understanding of <i>applying ratios to model everyday situations</i> on [Context]	You have shown a comprehensive understanding of <i>applying ratios to model everyday situations</i> in [Context]
Financial literacy- GST Calculations	You have shown some understanding performing of GST	You have shown an understanding of performing GST	You have shown a strong understanding of performing GST	You have shown a comprehensive understanding of

	calculations on <i>[Context]</i>	calculations on <i>[Context]</i>	calculations on <i>[Context]</i>	performing GST calculations in <i>[Context]</i>
Time Management	You have not submitted your assessment	You have not submitted your assessment by the due date	You have submitted your assessment by the due date	You have submitted your assessment by the due date
Overall Grade	Working TOWARDS	Working AT	Working ABOVE	Working BEYOND