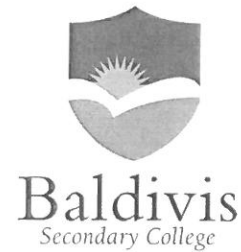


Year 7

Investigation 1- In Class Validation

GST & Best Buys

[Calculator Allowed]



FULL MARKS WILL NOT BE GIVEN unless ALL working out is shown.

Name: _____ Class _____

Total Marks: 15 marks

Total Time: 20 minutes

**Goods & Services Tax (GST) is a tax that is added to goods or services
(currently @ 10%) which shop-keepers & store owners pay to the government.**

[Although GST does not currently apply to all food items, for the purpose of this investigation we shall assume it does.]

1. If your family's weekly shopping bill was \$110 before GST, what will it cost with GST?

- a) Find 10% of \$110 **\$11**
- b) Add this to \$110 **\$110 + \$11 =**
- \$121**

Or

$$\mathbf{\$110 \times 1.1 = \$121}$$

(2 marks)

2. Decrease your answer to Qn. 1 above by 10%

$$\mathbf{\$121 \times 0.9 = \$108}$$

Or

$$\begin{aligned}\mathbf{\$121 \times 10\%} &= \mathbf{\$12.10} \\ \mathbf{\$121 - \$12.10} &= \mathbf{\$108}\end{aligned}$$

(1 mark)

3. Explain why you did not get \$110 as your answer

Because you are finding 10% of different amounts.

10% of \$110 is \$11,

whereas 10% of \$121 is \$12.10

Or similar

(2 marks)

4. If the GST was raised to 12%, how much would your family need to spend to buy the same groceries?

$$\text{\$110} \times 1.12 = \text{\$123.20}$$

$$\text{Or } \$110 + \$11 = (\$110 \times 0.12 = \$13.20) = \$13.20 + \$110.00 = \$123.20$$

(3 marks)

5. If you buy a 1.4 kg packet of Weet-bix for \$7.00,
How much is the cost price for 100g of Weet-bix?

(1000g = 1Kg)

Find 1Kg \$ cost

$$\text{\$7.00} / 1400 = \text{\$0.5} = 50 \text{ cents/100g}$$

Or

$$\text{\$5/kg} \quad (1000\text{g})$$

1g \$ cost

$$\text{\$0.005}$$

So 100g cost price is

$$50 \text{ c}$$

(3 marks)

6. If 750g of Weet-bix sells for \$6.00, how much is the cost price per 100g?

$$\text{\$8.00} / \text{Kg}$$

$$\text{\$0.80c/ 100g}$$

Reasoning:

$$750\text{g} = \frac{3}{4} \text{ of } 1\text{Kg}$$

$$\frac{1}{4} = \$2.00$$

Which one is cheaper?

#5 or the 1.4 Kg packet, 50c/100g is cheaper than 80 c/100g

(4 marks)