

1 Here is a list of ingredients needed to make 24 currant buns.

**Ingredients for 24 currant buns**

100 grams	butter
70 grams	sugar
140 grams	flour
40 grams	currants
30 millilitres	milk
2	eggs

Hans wants to make 30 currant buns.

(b) Find the percentage increase in the weight of butter needed to make 30 currant buns rather than 24 currant buns.

$$\begin{aligned}\text{Butter for 30 buns} &: 4.167 \dots \times 30 \\ &= 125 \text{ g}\end{aligned}$$

$$\begin{aligned}\text{Percentage increase} &: \frac{125 - 100}{100} \times 100\% \quad (1) \\ &= 25\% \quad (1)\end{aligned}$$

$$\begin{aligned}&\dots\dots\dots 25 \dots\dots\dots \% \\ &\hspace{10em} (2)\end{aligned}$$

(Total for Question 1 is 2 marks)

Kylie bought a van.

After 1 year, the value of the van was \$39 865

During this year, the value of the van decreased by 15%

2 (b) Work out the value of the van when Kylie bought it.

$$100 - 15 = 85 \quad (1)$$

$$\frac{85}{100} \times \text{initial} = 39\,865$$

$$\text{initial} = 39\,865 \times \frac{100}{85} \quad (1)$$

$$= 46\,900 \quad (1)$$

$$\begin{array}{r} \$ \quad 46\,900 \\ \hline \end{array} \quad (3)$$

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(Total for Question 2 is 3 marks)

3 In his previous job, Pierre was paid 400 euros in total for working a 5-day week.

In his new job, Pierre is paid 14 euros per hour.

In his new job, Pierre works for 7 hours each day for a 5-day week.

(a) Work out the percentage increase in the amount that Pierre is paid for a 5-day week.

$$\text{New job pay} : 14 \times 7 \times 5 = 490 \text{ euros } \textcircled{1}$$

$$\text{increase in pay} = 490 - 400 = 90 \text{ euros } \textcircled{1}$$

$$\% \text{ increase} = \frac{90}{400} \times 100\% = 22.5\% \textcircled{1}$$

$$\frac{22.5}{(4)} \%$$

Marie changes her job.

Her salary decreases by 6%

Her new salary is 23 030 euros.

(b) Work out Marie's salary before she changes her job.

$$\text{Let Salary before} = x$$

$$1 - 0.06 = 0.94 \textcircled{1}$$

$$x \times 0.94 = 23030$$

$$x = \frac{23030 \textcircled{1}}{0.94} = 24500 \textcircled{1}$$

$$\frac{24500}{(3)} \text{ euros}$$

(Total for Question 3 is 7 marks)