

Weekly Question (28 Nov)

The usual price of an oven was \$5850.

Dorothy bought it at a discount of 15%.

In addition, she had to pay 7% GST on the discounted price.

She placed a downpayment of 30% and paid the balance in monthly instalments over 2 years.

How much was the monthly instalment?

(Correct your answer to the nearest dollar.)

Suggested Solution:

$$\begin{aligned}\text{Discounted price} &= 85\% \times \$5850 \\ &= \frac{85}{100} \times \$5850 \\ &= \$4972.50\end{aligned}$$

$$\begin{aligned}\text{Price including GST} &= 107\% \times \$4972.50 \\ &= \frac{107}{100} \times \$4972.50 \\ &= \$5320.575\end{aligned}$$

$$\begin{aligned}\text{Total instalments} &= 70\% \times \$5320.575 \\ &= \frac{70}{100} \times \$5320.575 \\ &= \$3724.4025 \text{ (balance)}\end{aligned}$$

$$\begin{aligned}\text{Monthly instalment} &= \$3724.4025 \div 24 \text{ months} \\ &\approx \$155\end{aligned}$$

Each monthly instalment was **\$155**.