

Example 6

Natalie is financing the purchase of a new van. She has saved money for the down payment. The table below shows the details of the purchase:

Price of the new van	\$43 000
Trade-in value	\$5600
Tax	\$4862
Down payment	\$4500
Monthly payment	\$872.30
Term	48 months

a) Calculate the total amount borrowed.

$$\begin{aligned} \text{TOTAL Amount Borrowed} &= \text{Price of the van} - \text{Trade-in value} + \text{Tax} - \text{down payment} \\ &= 43000 - 5600 + 4862 - 4500 \end{aligned}$$

$$\text{Amount Borrowed from Bank} = \$ 37\,762$$

b) Calculate the total monthly payments paid over the term of the loan.

$$\begin{aligned} \text{Total amount paid} &= \text{monthly payment} \times 12 \text{ months} \times \# \text{ of years} \\ &= 872.30 \times 12 \times 4 \text{ years} \end{aligned}$$

$$\text{TOTAL Amount Paid to Bank} = \$ 41\,870.40$$

c) Calculate the finance charge (interest). (1 mark)

$$\begin{aligned} \text{Interest Paid} &= \text{Amount Paid to Bank} - \text{Amount Borrowed} \\ &= 41\,870.40 - 37\,762 \end{aligned}$$

Total Interest paid

$$= \$ 4\,108.40$$

