Example 2: Total Amount Paid and Total Interest

Dustin is looking for a loan for a new car. The price of the car is $25 600 after taxes. He has a down payment of $3000. The dealership offers to finance his purchase with a 4-year loan at 4.25%. The amortization rate for this loan is $22.77 per $1000.

a) Calculate the monthly payment for this loan.

Calculate the total loan = Price of car − down payment

$\Rightarrow 25600 - 3000 = \$22600$

monthly payment $= 22\,600 \times \frac{22.77}{1000} = \$514.60$

b) Calculate the total amount that Dustin will pay for the car over the 4 year period.

TOTAL PAID AFTER 4 years = monthly payments × 12 × years

$= 514.60 \times 12 \times 4$

$= \$24700.80$

c) Calculate the total amount of interest paid on the loan.

Interest PAID = Amount PAID − Amount Borrowed

$= 24700.80 - 22\,600$

$= \$2100.80$

d) If Dustin selects a 5-year loan instead of the 4-year loan, state the effect this would have on his:

i) Monthly payment. It will make the monthly payments smaller.

ii) Total amount of interest paid.

A longer amortization period will result into more interest paid over the life of the loan. The interest amount will INCREASE.