

Section 4.1 Extra Practice

1. Willow saves \$4000 to buy a used car. She found one that costs \$3500.
- What is the total cost of the car after tax?
 - Does Willow have enough saved to buy the car?

2. Use technology to determine the monthly payment for each situation.

| | Amount Borrowed | Interest Rate | Term |
|----|-----------------|---------------|---------|
| a) | \$20 000 | 0.9% | 3 years |
| b) | \$20 000 | 0.9% | 5 years |
| c) | \$20 000 | 3.9% | 3 years |
| d) | \$20 000 | 3.9% | 5 years |

3.
 - For each situation in #2, calculate the total amount paid for the car.
 - Which interest rate would you choose? Why?
4. Nick borrows \$5000 from a bank to buy his first car. His monthly payment is \$117.20 for four years.
- Calculate the total amount that Nick will repay the bank.
 - How much interest will he pay over the life of the loan?

5. George has found two used trucks that he likes.

Truck #1:

- One year old, two-door cab, manual transmission
- \$22 000 (not including tax), interest rate of 4.9% for 60 months

Truck #2:

- Three years old, four-door cab, automatic transmission
- \$20 000 (not including tax), interest rate of 4.9% for 48 months

- Use technology to calculate the monthly payments for each truck.
- How much would George pay, in total, for truck #1? truck #2?
- George commutes more than 100 km to his job site every day. Which truck should George buy? Justify your answer.



6. Kara decides to buy a hatchback. She finds two models she likes. Which hatchback is the better deal?

| Details | Hatchback #1 | Hatchback #2 |
|----------------------------|-----------------------|---------------------|
| Total cost (including tax) | \$16 950 | \$13 560 |
| Financing option | 2.9%, 36 months | 3.99%, 24 months |
| Warranty (included) | 2 years/ 40 000 km | none |

7. Calculate the after-tax cost of each vehicle.

| | Standard Vehicle Price | Extra Options Package | Freight and PDI |
|----|------------------------|-----------------------|-----------------|
| a) | \$32 000 | \$600 | \$1250 |
| b) | \$23 000 | \$1750 | \$1000 |
| c) | \$18 750 | \$575 | \$1800 |
| d) | \$13 300 | \$2100 | \$2325 |

8. Shelley is buying a new SUV for \$40 680, including taxes.
- Use technology to determine her monthly payment if she has a 4-year loan and the interest rate is
 - 0%
 - 2.9%
 - 5%
 - 10.9%
 - How does the interest rate affect the monthly payment?
 - If Shelley's SUV depreciates 20% each year, what will be the approximate value of the vehicle in four years?

9. David is financing his motorcycle at an interest rate of 6.9%. The total cost of the motorcycle is \$10 170, including taxes.

- Use technology to calculate his monthly payment if he finances for
 - 24 months
 - 36 months
 - 48 months
 - 60 months
- How does the length of the loan affect the monthly payment?

10. a) What is the total cost of David's motorcycle for each loan term in #9?
- b) What are the advantages and disadvantages of each term?

11. Janice just bought a new hybrid car. The before-tax cost was \$32 068. The dealership had 0% financing.

- Janice has a 72-month loan. What is her monthly payment?
- After one year, how much will Janice have paid on the car? How much will she still owe?
- Create a table of values to show how much Janice owes on the car at the end of each year.



Name: _____

Date: _____

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(continued)

- 12.** Calculate the cost for the extra kilometres driven on a leased vehicle.
- a)** 24 613 km at 7¢ each
 - b)** 11 784 km at \$0.07 each
 - c)** 7237 km at \$0.11 each
 - d)** 32 651 km at 11¢ each
- 13.** Lana just signed a four-year lease agreement for her first car. She had a down payment of \$575.00. Her monthly payments are \$287.24. How much will Lana have paid to lease the car at the end of the four-year term?
- 14.** Paul is leasing a truck for three years. He expects to drive about 80 000 km in the three-year period. The lease agreement allows him to drive 24 000 km a year. The penalty for extra kilometres is \$0.08 per kilometre. Paul's monthly payment on the lease is \$348. He knows it would cost \$490 per month to finance the truck. Should Paul lease the truck or buy it? Justify your answer.

