

From Past Provincial Exam Questions Workbook (not issued)

JUNE 2016

depreciate:
residual:

7. The price of a new car is \$26,000 (taxes included). It depreciates at a rate of 20% per year. What is the approximate residual value of the car after 3 years?

- A. \$10 400 B. \$13 300 C. \$15 600 D. \$20 800

11. Gabrielle wants to buy a cabin at Lac du Bonnet that costs \$165,000.00. She has saved \$25,000.00 that she will use as a down payment. The bank will give her a 15-year mortgage for the balance at 3.49%, compounded semi-annually.

equity:

- a) What will Gabrielle's payment be every two weeks?
- b) If the cabin appreciates in value an average of 3.00% per year, calculate the appreciated value of the cabin after 10 years.
- c) How much equity will Gabrielle have in the cabin after 10 years?

12. At the age of 30, Alfred began investing \$350.00 monthly into an investment account at an interest rate of 7.00%, compounded monthly. When he turned 45, the interest rate on this investment decreased to 5.00%, compounded monthly. Alfred plans to continue making monthly investments until he retires at 58.

- a) How much money will Alfred have in his account when he retires?
- b) Alfred withdraws \$2,000.00 per month from his account after he retires. If the interest rate remains at 5.00%, how many months can he withdraw \$2,000.00?
- c) Alfred's sister, Marianne, retires at the age of 60. Her portfolio is valued at \$200,000.00, earning 5.00%, compounded monthly. If Marianne wants the money to last until she is 85 years old, what is the maximum she can withdraw each month?

13. According to the Rule of 72, a reasonable estimate for the time it would take to double an investment of \$24,000.00 at an interest rate of 6.00%, compounded monthly is:

- A.** 3 years **B.** 4 years **C.** 12 years **D.** 18 years