

## Section 9.1 Savings Alternatives

1. Find the future value, FV, of each amount deposited into a daily interest savings account. Then, use a TVM Solver to check.

	Amount (\$)	Annual Interest Rate (%)	Term
a)	875	8	2 days
b)	25 000	4.5	3 weeks
c)	5000	5.5	1 year
d)	1500	2.4	Jul 1 to Aug 31

2. Jeremy's bank charges him \$4.95 per month for up to 10 transactions, plus 85¢ for each additional transaction. The table shows the number of transactions Jeremy made each month for one year. Determine the total transaction fee Jeremy paid each month.

Month	Number of Transactions	Transaction Fee
January	18	
February	8	
March	14	
April	21	
May	17	
June	5	
July	23	
August	18	
September	15	
October	24	
November	10	
December	22	

3. Refer to question 2. Suppose a second bank charged \$7.25 per month for the first 20 transactions, plus \$1 for each additional transaction. Would Jeremy have saved money on transaction fees if he had chosen this bank? Explain.

Use this information to answer questions 4 to 6.

First Bank offers three account options.

**Option 1:** \$11.25 per month for the first 10 transactions, plus \$1.25 for each additional transaction

**Option 2:** \$16.75 per month for the first 15 transactions, plus 85¢ for each additional transaction

**Option 3:** \$21.50 per month for an unlimited number of transactions

4. In a typical month, Suzanne uses an automated bank machine four times a week to withdraw cash. Her rent, hydro, phone bill, and car payment are automatically deducted from her account each month. Which banking option should Suzanne choose? Explain.
5. Jonah usually makes one weekly cash withdrawal and eight automatic bill payments each month. Which banking option should Jonah choose? Explain.
6. Heather does not carry cash. She uses her debit card to pay for everything. Which banking option should Heather choose? Explain.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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7. Michael plans to invest 50% of his tax return in a daily interest savings account that pays 4.8% per year. This year, Michael's tax return is \$1500. How much will his investment be worth at the end of each period?
- a) 1 year
  - b) 5 years
  - c) 15 years
8. Monica puts 20% of every pay cheque into a investment account that pays 8% interest per year, compounded monthly. Her average monthly pay is \$400. Use a TVM Solver to find the amount Monica will have in her account after 2 years.
9. Mathieu and his twin sister Lizette are each given \$3000 for their 16th birthday. They both decide to invest the money until their 19th birthday. Mathieu invests in a daily interest savings plan that pays 1.8% per year. Lizette invests in a plan that pays 2.4% per year, compounded monthly. Which twin's investment will be worth more on their 19th birthday? How much more?
10. Calculate the future value of each investment.
- Plan 1:** \$1000 at 12% compounded monthly for 5 years
- Plan 2:** \$1000 at 12% compounded semi-annually for 5 years
11. Refer to your answers to question 10. What effect does changing the compound period have on the future value of the investment?
12. Calculate the future value of each investment.
- Plan 1:** \$2000 at 6% compounded semi-annually for 10 years
- Plan 2:** \$2000 at 6% compounded semi-annually for 20 years,
13. Refer to your answers to question 12. What effect does changing the term of an investment have on its future value?