

Chapter Problem Wrap-Up

Student Text Page

465

Suggested Timing

15–30 min

Tools

- graphing calculator with TVM Solver application

Related Resources

- BLM 7–9 Chapter 7 Problem Wrap-Up Rubric

Summative Assessment

- Use **BLM 7–9 Chapter 7 Problem Wrap-Up Rubric** to assess student achievement.

Using the Chapter Problem Wrap-Up

- Students should have the solutions to the previous Chapter Problem questions in a separate portfolio for easy access.

Level 3 Sample Response

a) *Interest Rates*

Treasury bond: 3.5% per year, simple interest

Chequing account: 1.8% per year, compounded monthly

Mutual fund: 6% per year, compounded annually

$$\begin{aligned}\text{b) Total interest earned} &= \$12\,000 - \$10\,000 \\ &= \$2000\end{aligned}$$

$$\begin{aligned}\text{c) } r &= \frac{I}{Pt} \\ &= \frac{2000}{(10\,000)(4)} \\ &= 0.05 \text{ or } 5\%\end{aligned}$$

The effective rate of return on Chloe's investments is 5% per year.

$$\begin{aligned}\text{d) } A &= P(1 + i)^n \\ &= 10\,000(1 + 0.06)^4 \\ &= 12\,624.77\end{aligned}$$

Chloe could have earned \$2624.77, which is \$624.77 more than what she actually earned.

- e) Chloe's financial advisor did not recommend investing everything in the Mutual Fund because of risk.

Level 3 Notes

Look for the following:

- Demonstrates clear understanding of the problem
- Calculations are generally correct and clearly presented
- Answers are based on sound mathematical reasoning

What Distinguishes Level 2

- Slight misinterpretation of one part of the problem
- One or two minor calculation errors may be present
- Answers are based on mathematical reasoning containing minor flaws

What Distinguishes Level 4

- Clearly articulates a thorough understanding of the problem
- Calculations are completely error free, and presented with clear and thorough explanations
- Answers are based on sound mathematical reasoning, including identification of any underlying assumptions and discussion of other relevant factors that need to be considered