

Chapter 8 Problem Wrap-Up

Student Text Page

485

Suggested Timing

20 min

Tools

- graphing calculators

Related ResourcesBLM 8-14 Chapter 8 Problem
Wrap-Up Rubric

Teaching Suggestions

- Have students read the Chapter Problem Wrap-Up and ensure they understand what they are being asked to do. Relate the Chapter Problems revisits to the Chapter Problem Wrap-Up scenario. Discuss how Paul's financial situation has improved over time as he followed the concepts presented in the chapter. Connect this to the finance concepts learned in Chapter 7. Discuss how the situation of Paul and his fiancée is parallel to the story of John and Lina in Chapter 7.
- Circulate as students complete the questions and assist them as necessary.
- If you assigned the Chapter Problem revisits section by section, the Chapter Problem Wrap-Up can be used as part of a summative assessment.
- If you are assigning the Chapter Problem as a whole at the end of the chapter, you can use it as part of a summative assessment or as a formative assessment prior to a Chapter Test or Task.

Level 3 Sample Response

- a) Use a TVM Solver.

$$N = 300$$

$$I\% = 6$$

$$PV = 169000$$

$$PMT = -1081.2731$$

$$FV = 0$$

$$P/Y = 12$$

$$C/Y = 12$$

$$PMT: END$$

The required monthly mortgage payment is \$1081.27.

- b) Use a TVM Solver.

$$N = 288.6306816$$

$$I\% = 6$$

$$PV = 169000$$

$$PMT = -1100$$

$$FV = 0$$

$$P/Y = 12$$

$$C/Y = 12$$

$$PMT: END$$

If Paul pays \$1100 per month on the mortgage, he will pay off the mortgage in 289 months or 24 years and 1 month.

Level 3 Notes

Look for the following:

- appropriate solutions for all parts of the problem with minor errors
- understanding of mortgage calculations
- understanding of problem-solving techniques
- organised solution and clear justification for responses
- effective use of financial terms

What Distinguishes Level 2

Look for the following:

- some appropriate solutions for most parts of the problem with some significant errors
- some understanding of mortgage calculations
- some understanding of problem-solving techniques, but difficulty in applying the techniques
- somewhat organised solution and some justification for responses
- somewhat effective use of financial terms

What Distinguishes Level 4

Look for the following:

- appropriate and detailed solutions for all parts of the problem with very few or no errors
- thorough understanding of mortgage calculations
- highly effective use of problem-solving techniques
- highly organised solution and clear, accurate, and detailed justification for responses; might include comments about the risks and expenses involved in Paul's plan or the effects of a change in the interest rate
- highly effective use of financial terms

Summative Assessment

- Use **BLM 8-14 Chapter 8 Problem Wrap-Up Rubric** to assess student achievement.