FastCourse Series

Chapter 2: Financial Functions and What-If Analysis

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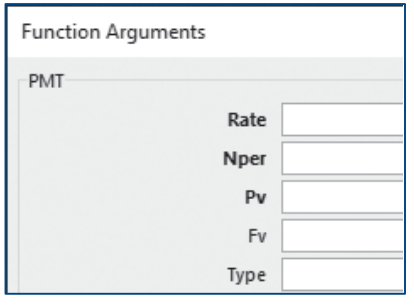
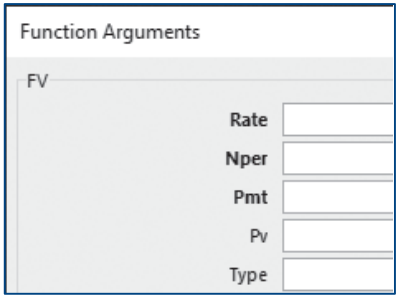
Learning Objectives

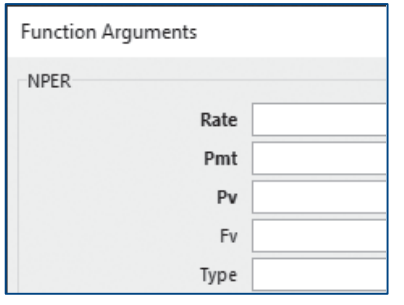
- After studying this chapter, you will be able to:
  - Create financial functions
  - Create one-variable and two-variable Data Tables
  - Use What-If Analysis tools to create scenarios
  - Adjust input values using Goal Seek

Creating Financial Functions

- Calculate monthly payments, investment worth, how long to pay off debt
- Valuable for decision-making, analysis, and forecasting
- Financial function arguments
  - Arguments are similar for many functions







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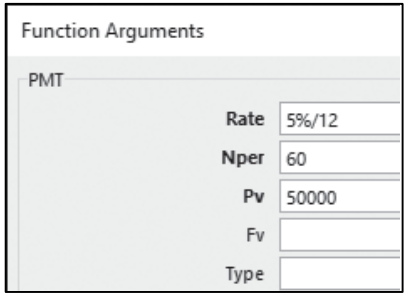
Creating Financial Functions (cont.)

- PMT function (Payment function)
  - Calculates payment amount required to pay off a loan
  - Calculates how much to save each month to reach a future value amount



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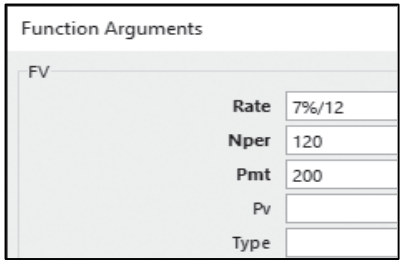
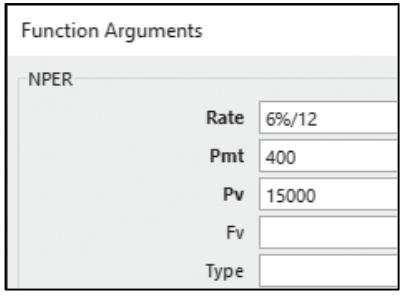
Creating Financial Functions (cont.)

- FV function (future value function)
  - Calculates the future value of an investment for a specific interest rate, investment length, and payment



- NPER function
  - Missing number of periods required



Using What-If Analysis Tools

- Asks a question – what if?
  - What if the interest rate increases
  - What if I invest money
- Works best with complex formulas list PMT, FV, or NPER

Using What-If Analysis Tools (cont.)

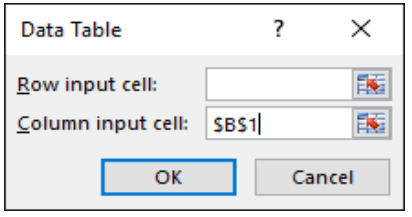
- Using data tables
  - Data Tables are NOT tables
  - No sorting or filtering or inserting a total row
  - Insert multiple different argument values and see results all at once

Using What-If Analysis Tools (cont.)

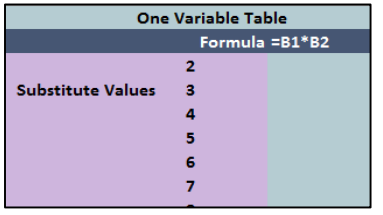
- Creating one- or two-variable data tables

	A	B
1	**Variable:**	**1**
2	**Constant:**	**10**

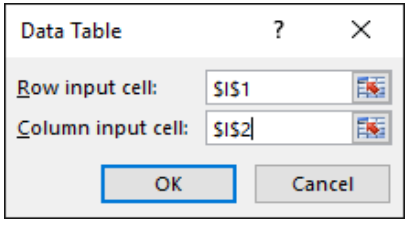
Input cell values



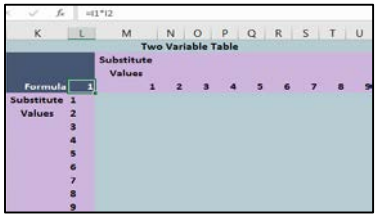
One-variable data table



Substitute values replace the variable input cell



Two-variable data table



Substitute values in row AND column replace input cells

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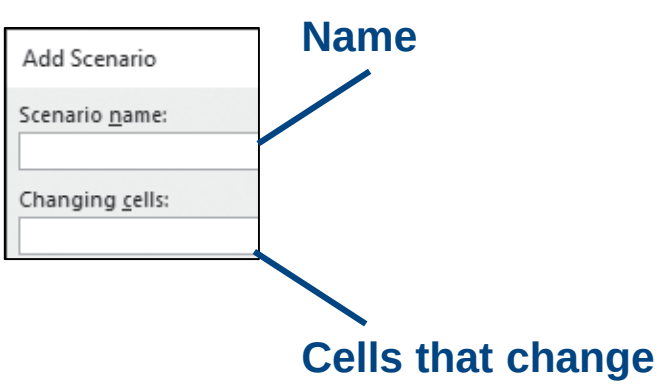
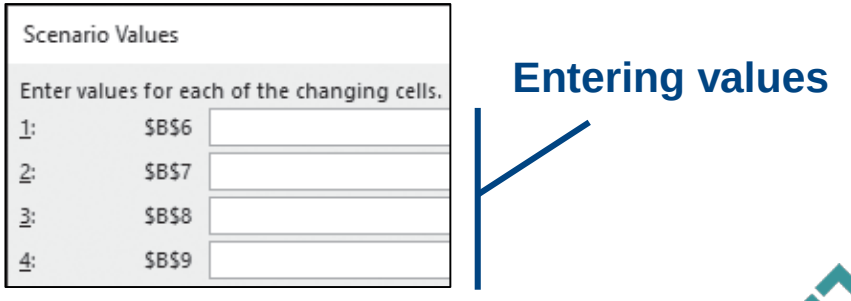
Scenario Manager

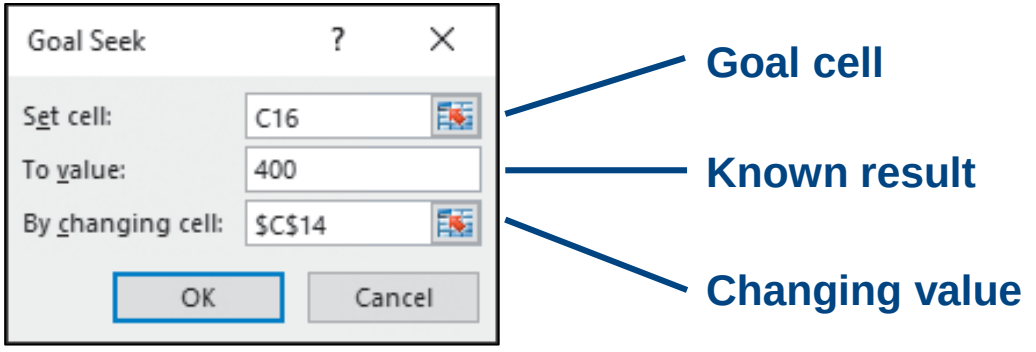
- Compare results with multiple possibilities
  - Up to 32 variables
- Results shows in worksheet or scenario summary report
- Scenario requirements: scenario name, identify changing cells, entering value for each changing cell





Goal Seek

- Know the result you want first
- Excel works backward to find required input



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