# Numbers
## Exam Preparation Guide

 Technical Training & Certification

# Contents

# About This Guide

This guide provides all the information that you need to prepare for the Apple Certified Pro - Numbers exam to earn Apple Certified Pro certification.

# The Benefits of Apple Certification

Apple Training & Certification programs are designed to keep you at the forefront of Apple's digital media technology. Certification creates a benchmark to assess your proficiency in a specific Apple app. By passing an exam, you earn Apple Certified Pro status, which gives you a competitive edge in today's ever-changing job market.

## What is an Apple Certified Pro?

An Apple Certified Pro is a certified user who has reached the highest skill level in the use of Apple apps as recognized by Apple.

## How do I become an Apple Certified Pro?

To become an Apple Certified Pro, you must pass an online exam administered at an Apple Authorized Training Center (AATC). Apple Certified Pro certification acknowledges basic operational knowledge of an app. Apple Certified Pro exams are administered at the end of specific courses at the AATCs. Class attendance is recommended but not required.

If you prefer to learn on your own or believe you already have the necessary skills in an app, you can register to take the Apple Certified Pro exam at an Apple Authorized Training Center for a fee.

## What are the benefits of being an Apple Certified Pro?

Certification distinguishes you among applicants to colleges or prospective employers. As an Apple Certified Pro, you'll receive a certificate from Apple recognizing you as a skilled user of the app, and you'll have the right to use the Apple Certified Pro logo on your résumé, business cards, and website—so you can leverage the power of the Apple brand.

After you pass a certification exam, you'll receive an email detailing how to obtain your certificate. The email also includes LinkedIn, Facebook, and Twitter icons to make it easy for you to share your certification news on social media sites.

You'll also receive instructions on how to log in to the Apple Certification Records System, where you can do the following:

- Update your profile information and opt in to display your Apple certifications on the Apple Certified Professionals Registry

- Review your certification progress

- Download certification logos to use on business cards, résumés, websites, and more

- Provide access to employers to verify certifications

- Access numerous resources

## Exam Details

The Apple Certified Pro - Numbers exam (Exam no. 9L0-905) is a computer-based test offered at Apple Authorized Training Centers (AATCs).

You have up to 90 minutes to complete the exam, which consists of 47 multiple choice and interactive media questions. The questions are based on the objectives listed in this guide. This exam contains some performance-based questions that require you to perform tasks in Numbers.

The score required to pass is 83 percent. To prepare for the exam, read the objectives in this guide to determine which areas you need to review. The primary reference source for this exam is the Apple Pro Training Series book *Pages, Numbers, and Keynote* by Mark Wood (ISBN 0-13-398706-X).

You aren't allowed to access any resources or references during the exam, but you may have the app open when answering the performance-based questions. Although this guide divides the objectives into knowledge areas, questions are presented randomly during the exam.

# Preparing for the Exam

When preparing for a certification exam, it's important to experience the app, review the training materials—including the Apple Pro Training Series curriculum—and study this Exam Preparation Guide. See the next section for objectives from the curriculum.

Consider these recommended steps to help you prepare for your certification exam:

- Review the tutorials, lesson review questions, and lesson files in the Apple Pro Training Series book *Pages, Numbers, and Keynote*. To purchase the book at a 30% discount, go to www.peachpit.com/promotions/welcome-apple-customers-books-138516.

- Gain experience using Numbers.

- Review the Numbers manuals. The complete documentation is available at support.apple.com. It's free, searchable, and linkable. You can also open Numbers Help by choosing Help > Numbers Help.

- Visit training.apple.com for information on the Apple Pro Training Program.

To provide comments and feedback to Apple about Numbers, go to www.apple.com/feedback.

# Lesson Objectives: Discovering Common Features

After completing the Discovering Common Features lesson, you should be comfortable performing the following tasks:

- Discuss the basic features of Numbers

- Open, save, close, and manage spreadsheets

- Navigate the template window

- Edit text, photos, and layout

## Review questions

1. How do you choose a template?

2. How can images found in the Media Browser be placed in Numbers?

3. True or False? Tables in Numbers can contain functions.

4. Although Numbers saves your work automatically, why would you want to manually save versions of your work?

5. What kinds of shadow can be applied to an object in Numbers?

## Answers

1. By choosing File > New in Numbers, the templates are presented. By default, the Template Chooser displays all the currently installed templates. Double-clicking one of these will select it. However, the application preferences can be set to always open a document created from a specific template.

2. Images can be dragged from the Media Browser onto a document. To replace a placeholder image, click the placeholder icon on the image, and select a replacement image from the Media Browser.

3. True. Table cells in Numbers can contain functions.

4. Manually saving your work creates versions that you can revert to at any time, enabling you to restore a previous state of your document.

5. Drop, Contact, and Curved are the types of shadows that can be applied in Numbers.

# Lesson Objectives: Organizing Data Using Numbers

After completing the Organizing Data Using Numbers lesson, you should be comfortable performing the following tasks:

- Open and develop Numbers documents

- Define key spreadsheet terms

- Create and manage sheets

- Add functions to a table

- Print Numbers documents

## Review questions

1. Describe how to duplicate a sheet.

2. Name three data formats found in Numbers that are not available in Pages or Keynote.

3. How do you rename a table?

4. Describe how to repeat a formula across an entire row of a table.

5. Describe how to open the Formula Editor.

## Answers

1. From the Sheet menu, choose Duplicate.

2. Five data formats are exclusive to Numbers: checkbox, star rating, slider, stepper, and pop-up menu.

3. Select the table name on the sheet and type a new name (the Table Name option must be selected in the Table inspector).

4. Click the cell containing the formula, and then drag either the left or right edge of the cell to the left or right to repeat the formula along a row.

5. Click a cell and press = (equal sign) to open the Formula Editor. (You can also click a cell and choose Insert > Formula > Create Formula.)

# Lesson Objectives: Making Interactive Spreadsheets

After completing the Making Interactive Spreadsheets lesson, you should be comfortable performing the following tasks:

- Open and upgrade a Numbers spreadsheet

- Open and edit an Excel workbook

- Use dynamic data formats

- Add conditional highlighting

- Create and apply table styles

- Secure spreadsheets with passwords

## Review questions

1. How do you open a Numbers 09 document and edit it without upgrading the original document?

2. Describe how to save a table style.

3. What is a key advantage of referencing cells when using lists?

4. Which data format has six values: 0, 1, 2, 3, 4, and 5?

5. Describe conditional highlighting.

6. Which data format is similar to slider?

## Answers

1. When prompted to upgrade the 09 document, click "Edit a Copy" rather than Upgrade.

2. Select a table with the desired styles already applied. In the Table inspector, click the + (plus sign) button in Table Styles.

3. By referencing list items, any changes made in the original list are automatically reflected in the referenced list.

4. Star ratings have six values.

5. Conditional highlighting applies formatting to a cell or range of cells when rule conditions are met. For example, a cell could be set to automatically fill with a green background when its value matches the rule set.

6. Steppers are similar to sliders.

# Lesson Objectives: Making Customized Calculators

After completing the Making Customized Calculators lesson, you should be comfortable performing the following tasks:

- Add and modify formulas

- Concatenate cells

- Differentiate between relative and absolute cell references

- Sort and filter tables

- Create custom functions

## Review questions

1. Name the default operator.

2. Can functions be used in Numbers?

3. Describe two ways to apply a filter to a table in Numbers.

4. Describe how to temporarily turn off filters.

5. What is the role of the Function Browser?

6. Text arguments need to be placed inside what kind of marks to be valid?

## Answers

1. SUM or addition is the default operator.

2. Functions can be used in Numbers, Keynote, and Pages.

3. You can apply a filter by clicking a column reference header in a table and choosing Filter Table from the pop-up menu; or by using the Filter inspector.

4. In the Filter inspector, deselect Filters.

5. The Function Browser lists the available functions, explains what each does, and pro- vides examples of their use.

6. Text arguments must be placed inside quotation marks.

# Lesson Objectives: Illustrating Data Using Charts

After completing the Illustrating Data Using Charts lesson, you should be comfortable performing the following tasks:

- Open and edit a CSV file

- Create and edit charts

- Format chart styles

- Mix chart types

- Save Numbers templates

- Edit data references

## Review questions

1. Describe how to change a column chart to a bar chart.

2. What are data references?

3. How do you save a chart style?

4. In a mixed chart type, what are the three types of series plotting?

5. Name the four types of interactive charts.

## Answers

1. Select the chart. In the Chart inspector, change Chart Type to Bar Chart.

2. When creating a chart based on an existing table, the chart series are plotted using the table data by linking or referring to the table data. These links are called data references.

3. Chart styles are created in the same way table styles are created. Click a chart with the desired formatting, and then in the Chart inspector's Chart Styles area, click the Add (+) button to save the chart style.

4. Column, line, and area

5. Interactive Column, Interactive Bar, Interactive Scatter, and Interactive Bubble