

# Numbers vs Excel



# iWork vs Office

- Apple's iWork is an office suite that runs on OS and iOS devices, using iCloud to store the documents, although the OS versions have more capabilities than the iOS versions. Components are:
  - Pages
  - Numbers
  - Keynote
- Apple's iWork for iCloud is accessible via a browser on the internet
- Microsoft's Office for Mac is an office suite that runs on OS devices. Current components are:
  - Word
  - Excel
  - PowerPoint
  - OneNote
  - Outlook for subscriptions, not purchases
- Microsoft's Office Mobile introduced in 2013 has scaled down versions of Word, Excel and PowerPoint for iOS devices and uses OneDrive to store the documents
- Microsoft Office Online offers web apps

# Numbers/iWork History

- iWork '05 was released in January of 2005 and consisted of Keynote and Pages for OS
- iWork '08 was released in August of 2007 and also included Numbers for OS
- iWork '09 was released in January and in 2011 became available in the Mac App Store for \$19.99 per OS application
- iWork for iPad was released in 2010 and was available in the App Store for \$9.99 per iOS application
- iWork was overhauled in 2013 for OS X and came free with purchase of a new OS or iOS device after October 1, 2013
- OS X version released June 13, 2017, requires Sierra and is free for all your computers and iOS devices
- Latest version released September 17, 2018, requires High Sierra
- Offline Help files included
- Missing Manual for iWork book also available from Amazon, etc. (© 2014 246 pages on Numbers 3.1 for OS, 22 pages on iOS)
- [www.takecontrolbooks.com](http://www.takecontrolbooks.com) also has an 285 page ebook ©2018 on Numbers 5.0

# Excel/Office History

- In 1985 Excel 1.0 was released for the Mac. Excel for Windows came along in 1987
- Microsoft Office for Mac was introduced in 1989 and included Word, Excel, and PowerPoint
- Microsoft Office 2008 for Mac Home and Student Version could be run on 2 computers—this is the version I use
- Microsoft Office 2011 for Mac Home and Student Version could only be run on 1 computer
- Current version of Office is Office 2016 which is available for Office 365 subscribers
  - Office 365 Home costs \$99.99 a year and allows up to 5 users
  - Office 365 Personal costs \$69.99 a year for one user
  - Office Home & Student 2016 for Mac purchase costs \$149.99 for one user
- Online Help only for the current version, need Missing Manual *Office* ????  
*For Macintosh* for older versions

# Input/Output File Formats

- Numbers Input
  - Standard Numbers file is .numbers
  - Numbers can also open .xls & .xlsx (may have problems with some Excel formulas)
  - Numbers can also open .txt (formatting assumed to be columns of data)
- Numbers Output
  - Standard **Save...** output is .numbers
  - **Save as Template...** output is .template
  - **Export To...** has options for PDF..., Excel..., CSV..., and Numbers '09...
- Excel Input
  - Standard Excel file is .xlsx
  - Excel can also open .xls, .txt (with formatting info to be supplied) and other formats output by Excel
- Excel Output
  - Default **Save...** output is .xlsx
  - Optional output can be .xls, .xltx, .xlt, .csv, .htm, and PDF as well as some additional specialty formats

# Basic Common Capabilities

- Lists of information
  - Can be sorted by any column
  - Good for inventories—software, home furnishings, passwords
- Mathematical formulas
  - Simple totals
  - More complex formulas (Excel has more formula capabilities than Numbers)
- Charts
- Default structure is a workbook consisting of one sheet, additional sheets can be added as needed
- Files can be password protected

# Similar Capabilities

- Excel sheets default to the maximum 16,384 columns x 1,048,576 rows, much more than you are likely to need and scrolling to the last row could take days
- Numbers sheets default to 7 columns x 22 rows, additional columns and rows can be added or deleted as needed, but tens of thousands of rows make for slow response times to scroll, etc.
- Excel cells can be defined as General, Number, Currency, Accounting, Date, Time, Percentage, Fraction, Scientific, Text, Special (Zip Code, Phone #, SSN), and Custom
- Numbers cells can be defined as Automatic, Number, Currency, Percentage, Fraction, Numeral System, Scientific, Text, Date & Time, Duration, Checkbox, Star Rating, Slider, Stepper, Pop-Up Menu, and Custom Format

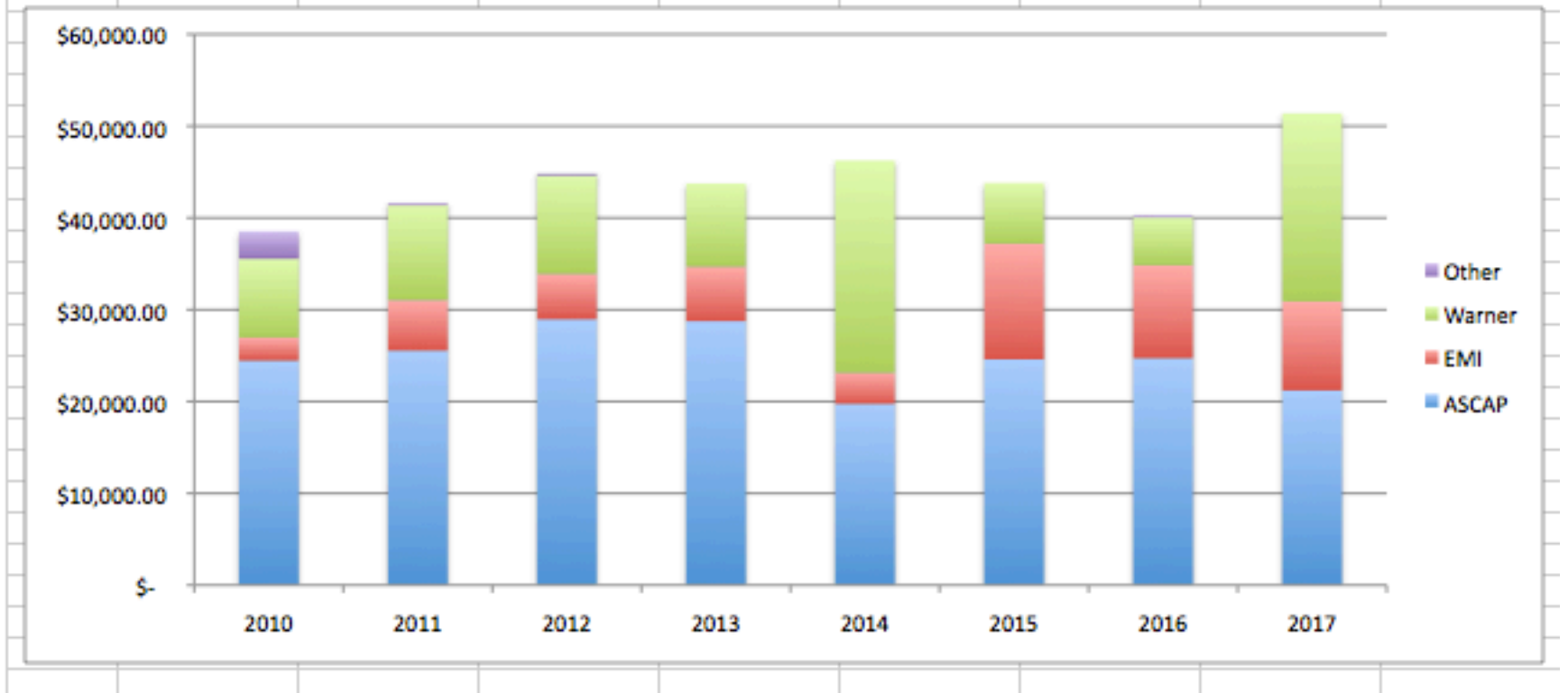
# Unique Capabilities

- Numbers offers a variety of templates when you create a new document
  - **Basic** includes Blank, Checklist, Checklist Total, Charting Basics
  - **Personal Finance** includes Simple Budget, Personal Budget, Personal Savings, My Stocks, Shared Expenses, Net Worth, Retirement Savings, Loan Comparison, Mortgage Calculator
  - **Personal** includes Calendar, Schedule, Running Log, Home Improvement, Team Organizer, Baby Record, Travel Planner, Party Planner, Meal Planner, Recipe
  - **Business** includes Employee Schedule, Invoice, Return on Investment, Financials, Break-Even Analysis
  - **Education** includes Attendance, Grade Book, GPA, Probability Lab, Correlation Project, School Savings, Academic Calendar
- Numbers acts more like a page layout program allowing you to include images and other media
- Excel just gives you a spreadsheet grid, but you can also create charts and place them on the grid and also add images, movies, and text boxes
- Newer versions of Excel may offer templates and additional features



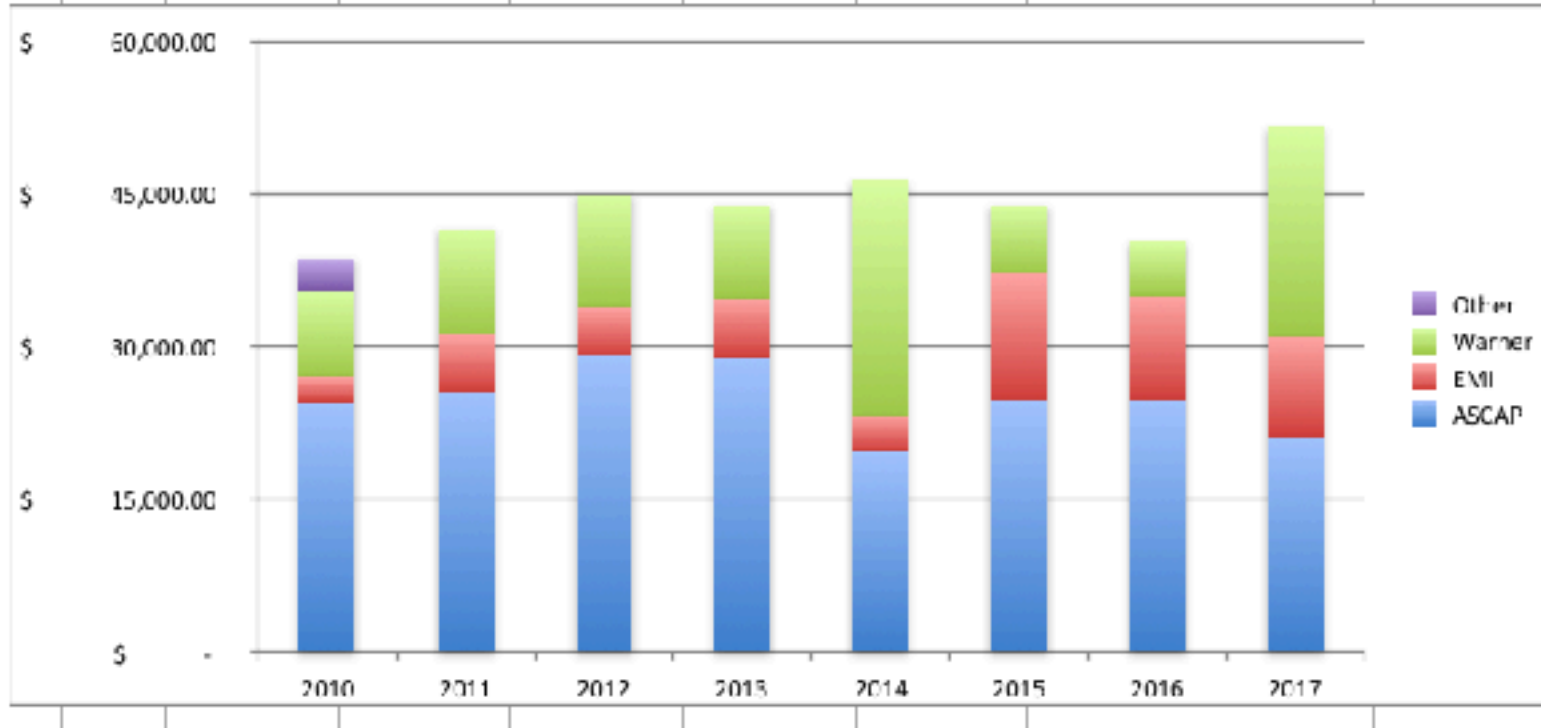
# Excel Chart Example

	2010	2011	2012	2013	2014	2015	2016	2017
ASCAP	\$24,465.07	\$25,554.38	\$28,969.37	\$28,761.88	\$19,767.22	\$24,583.74	\$24,727.69	\$21,214.23
EMI	\$ 2,509.16	\$ 5,506.01	\$ 4,942.02	\$ 5,944.56	\$ 3,378.81	\$12,628.83	\$10,119.59	\$ 9,690.12
Warner	\$ 8,589.02	\$10,550.09	\$10,911.67	\$ 9,039.67	\$23,100.04	\$ 6,598.37	\$ 5,438.16	\$20,487.11
Other	\$ 2,974.97	\$ 0.40	\$ 24.84				\$ 2.06	
TOTAL	✓ \$35,563.25	✓ \$41,610.48	✓ \$44,823.06	✓ \$43,746.11	✓ \$46,246.07	✓ \$43,810.94	✓ \$40,285.44	✓ \$51,391.46



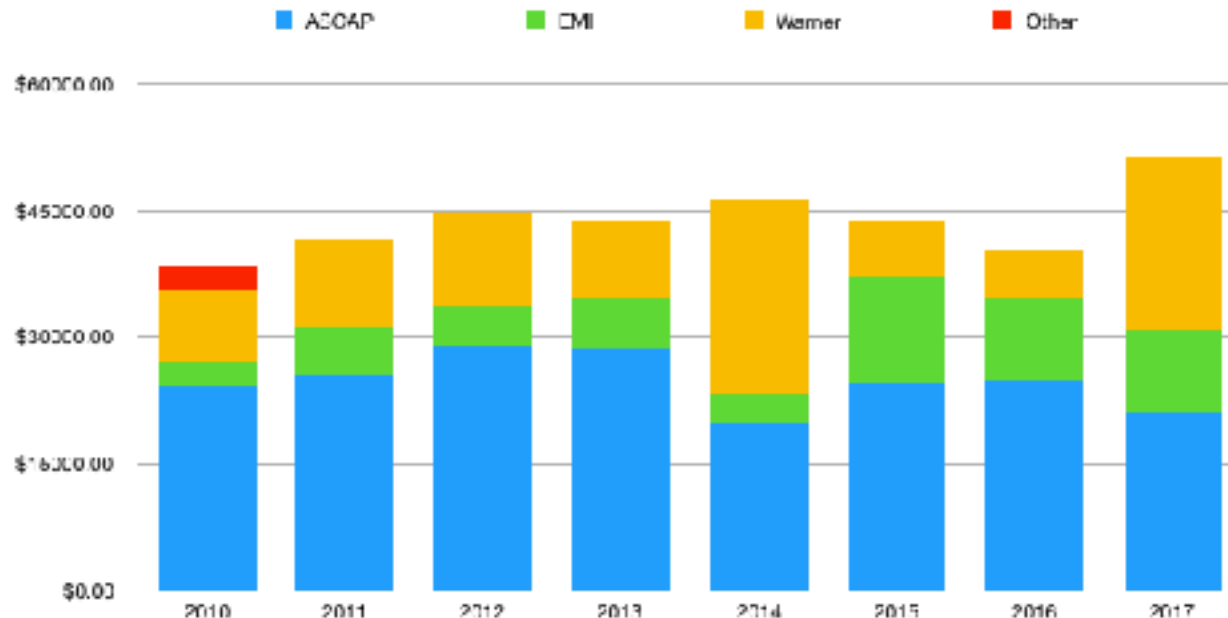
# Excel Chart Imported into Numbers

	2010	2011	2012	2013	2014	2015	2016	2017
ASCAP	\$24,465.07	\$25,554.38	\$28,969.37	\$28,761.88	\$19,767.22	\$24,583.74	\$24,727.69	\$21,214.23
EMI	\$2,509.16	\$5,506.01	\$4,942.02	\$5,944.56	\$3,378.81	\$12,628.83	\$10,119.59	\$9,690.12
Warner	\$8,589.02	\$10,550.09	\$10,911.57	\$9,039.57	\$23,100.04	\$6,598.37	\$5,438.16	\$20,487.11
Other	\$2,974.97	\$ 0.40	\$ 24.84				\$ 2.06	
TOTAL	\$35,563.25	\$41,610.48	\$44,823.06	\$43,746.11	\$46,246.07	\$43,810.94	\$40,285.44	\$51,391.46

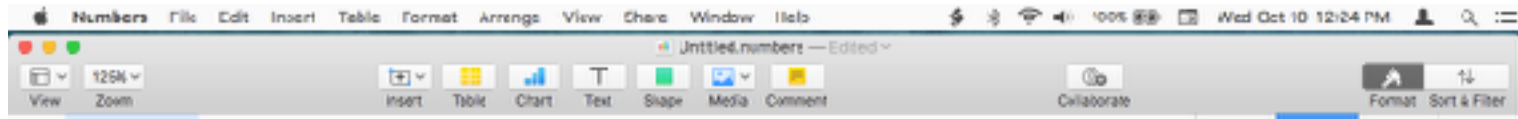


# Chart Created in Numbers

	2010	2011	2012	2013	2014	2015	2016	2017
ASCAP	\$24,465.07	\$25,554.38	\$28,969.37	\$28,761.88	\$19,767.22	\$24,533.74	\$24,727.69	\$21,214.23
EMI	\$2,502.16	\$5,503.01	\$4,942.02	\$5,944.56	\$3,378.81	\$12,628.83	\$10,119.59	\$9,690.12
Warner	\$3,585.07	\$10,550.09	\$10,911.87	\$9,039.67	\$23,100.04	\$6,598.37	\$5,438.16	\$20,487.11
Other	\$2,974.97	\$0.00	\$24.84				\$2.06	
TOTAL	\$38,538.22	\$41,610.88	\$44,847.90	\$43,746.11	\$46,246.07	\$43,810.94	\$40,287.50	\$51,391.46

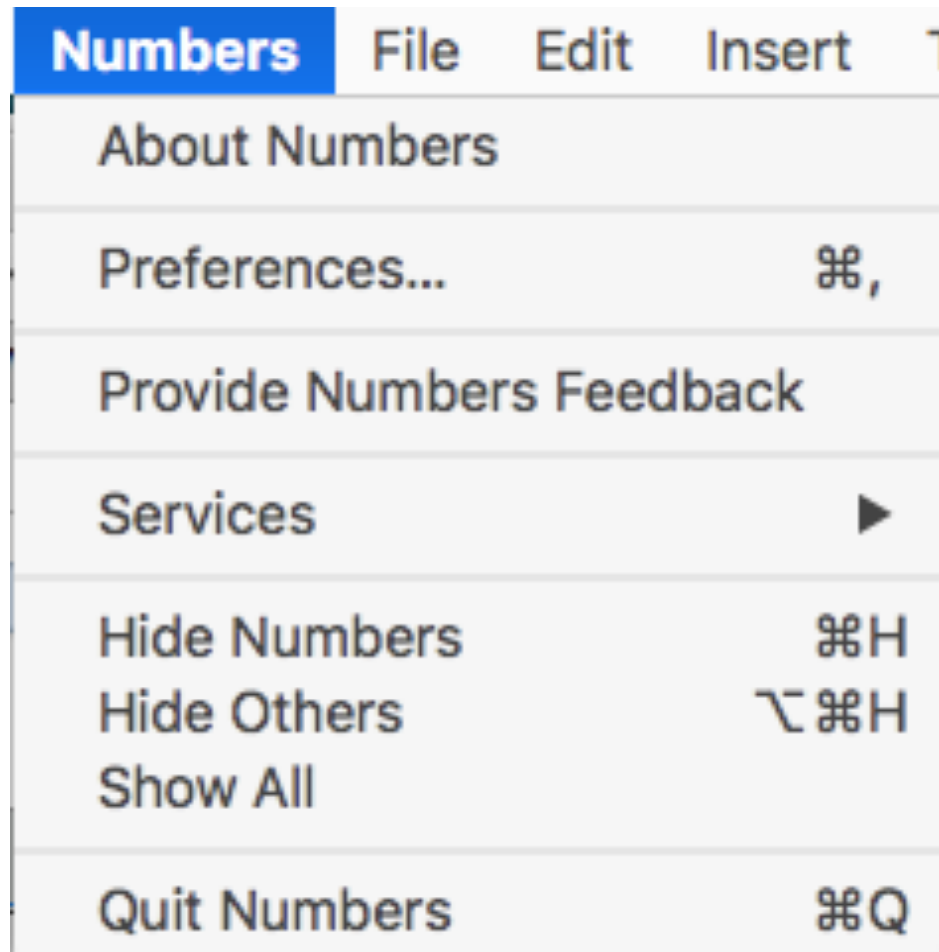


# Numbers Menu Bar and Tool Bar

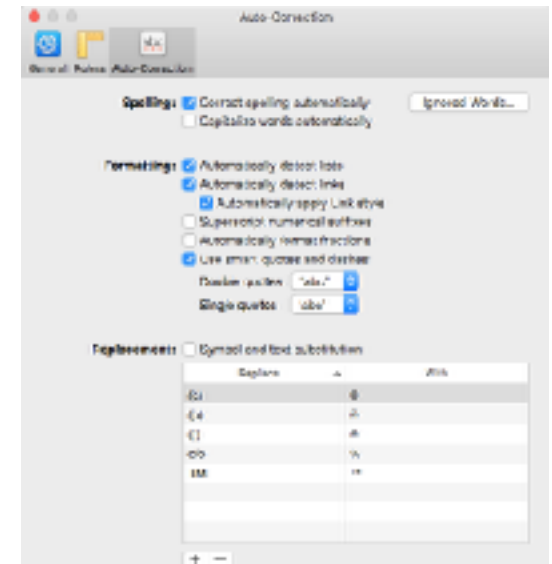


- Menu Bar has the typical options—Numbers, File, Edit, Insert, Table, Format, Arrange, View, Share, Window, and Help
- Tool Bar has additional options—View, Zoom, Insert, Table, Chart, Text, Shape, Media, Comment, Collaborate, Format, and Sort & Filter
- Tool Bar can be modified to include additional options or eliminate unwanted options
- Tool Bar can be hidden if you don't want to use it

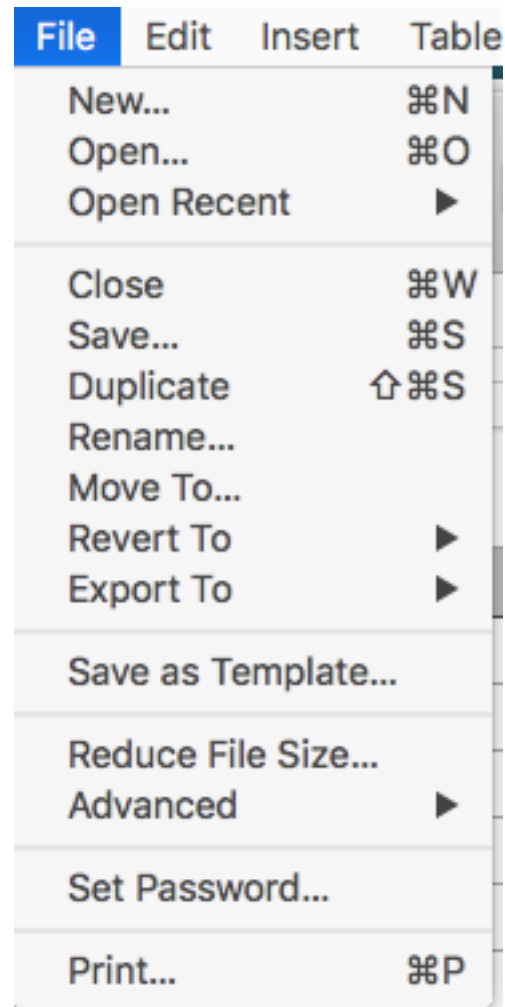
# Menu Bar—Numbers



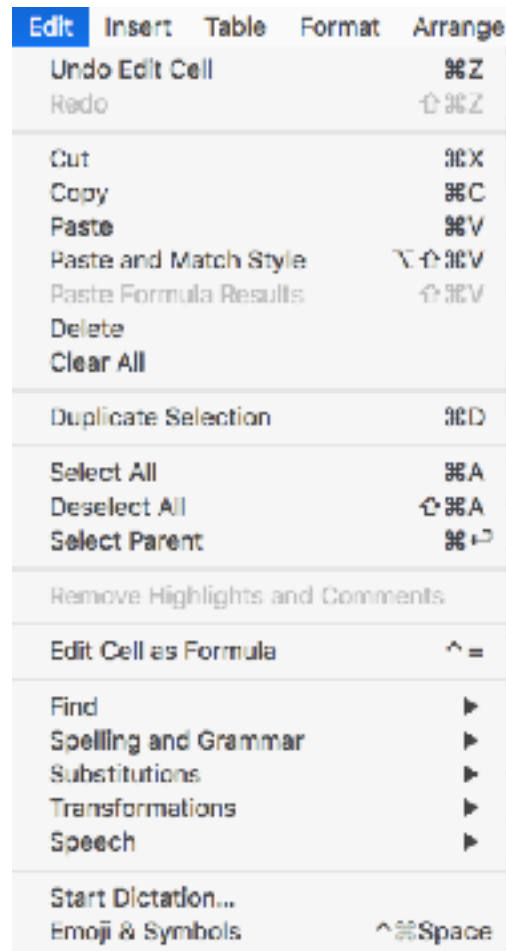
# Numbers Preferences



# Menu Bar—File

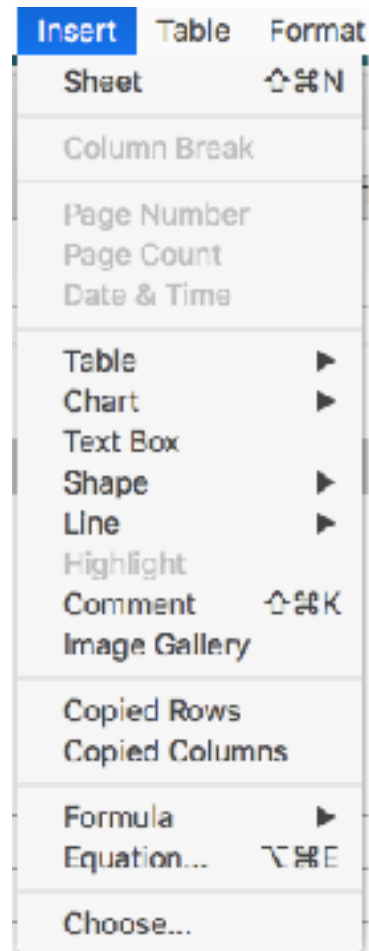


# Menu Bar—Edit





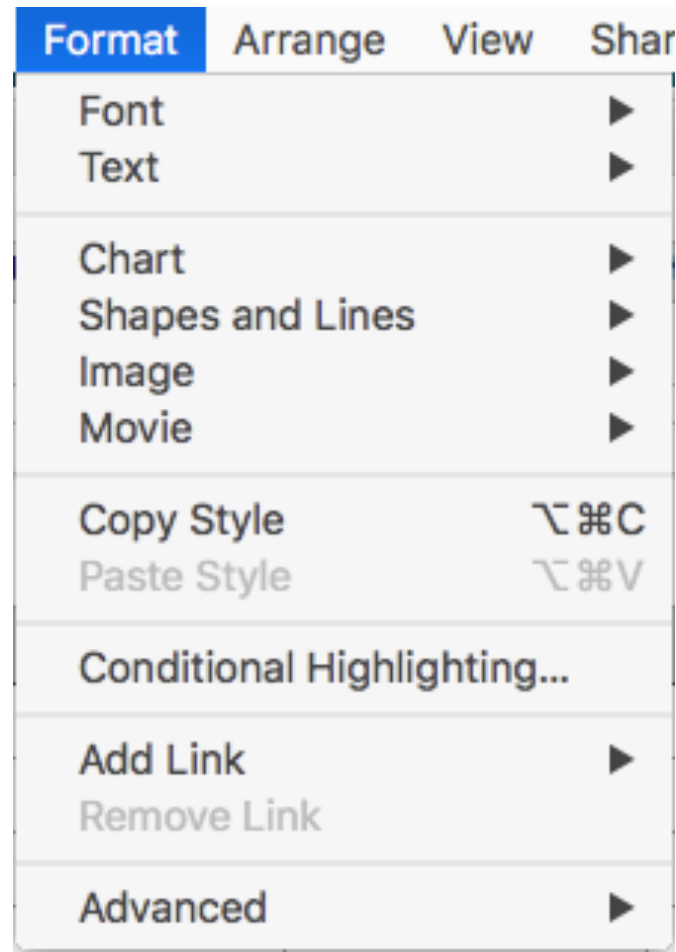
# Menu Bar—Insert



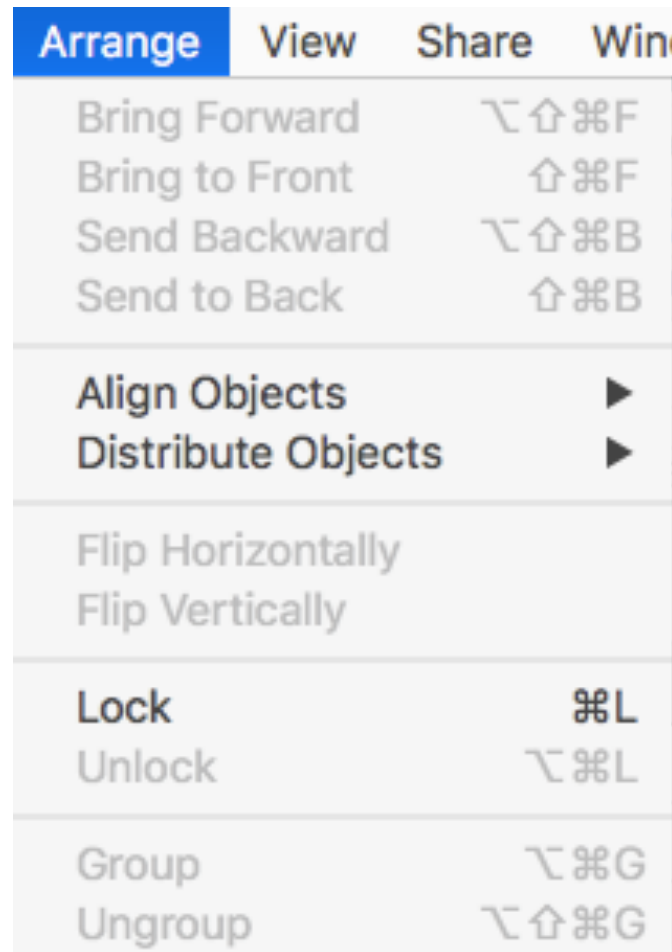
# Menu Bar—Table

Table	Format	Arrange	View
Add Row Above			
Add Row Below			
Add Header Column Before			
Add Header Column After			
Delete Row			
Delete Column			
Header Rows ▶			
✓ Freeze Header Rows			
Header Columns ▶			
✓ Freeze Header Columns			
Footer Rows ▶			
Resize Row to Fit Content			
Resize Column to Fit Content			
Distribute Rows Evenly			
Distribute Columns Evenly			
Hide Row			
Unhide All Rows			
Hide Column			
Unhide All Columns			
Sort & Filter Options			
Apply Sort Rules			
Autofill Cells ▶			
Merge Cells			
Unmerge Cells			
Transpose Rows and Columns			
✓ Wrap Text			

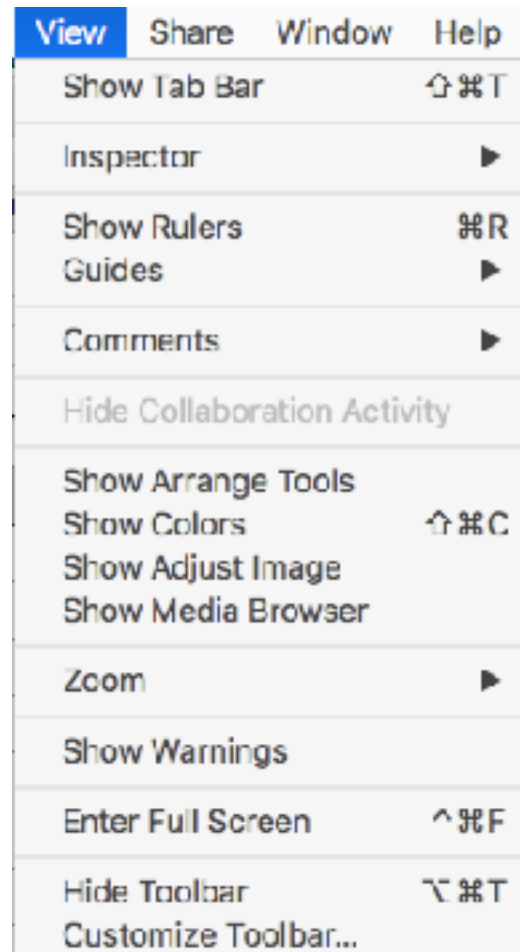
# Menu Bar—Format



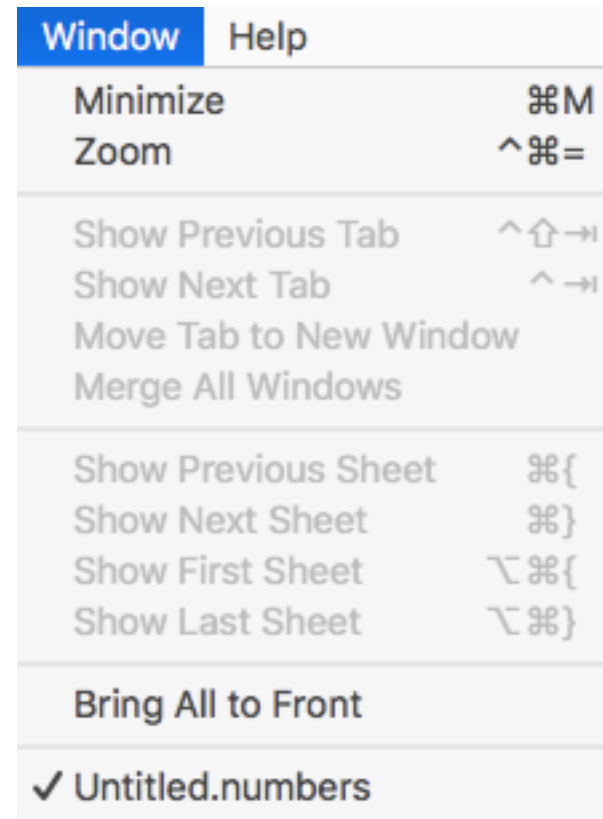
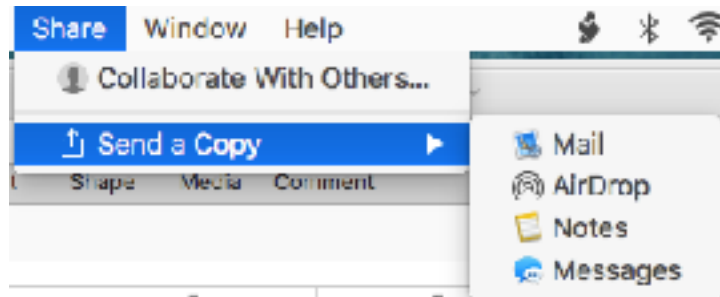
# Menu Bar—Arrange



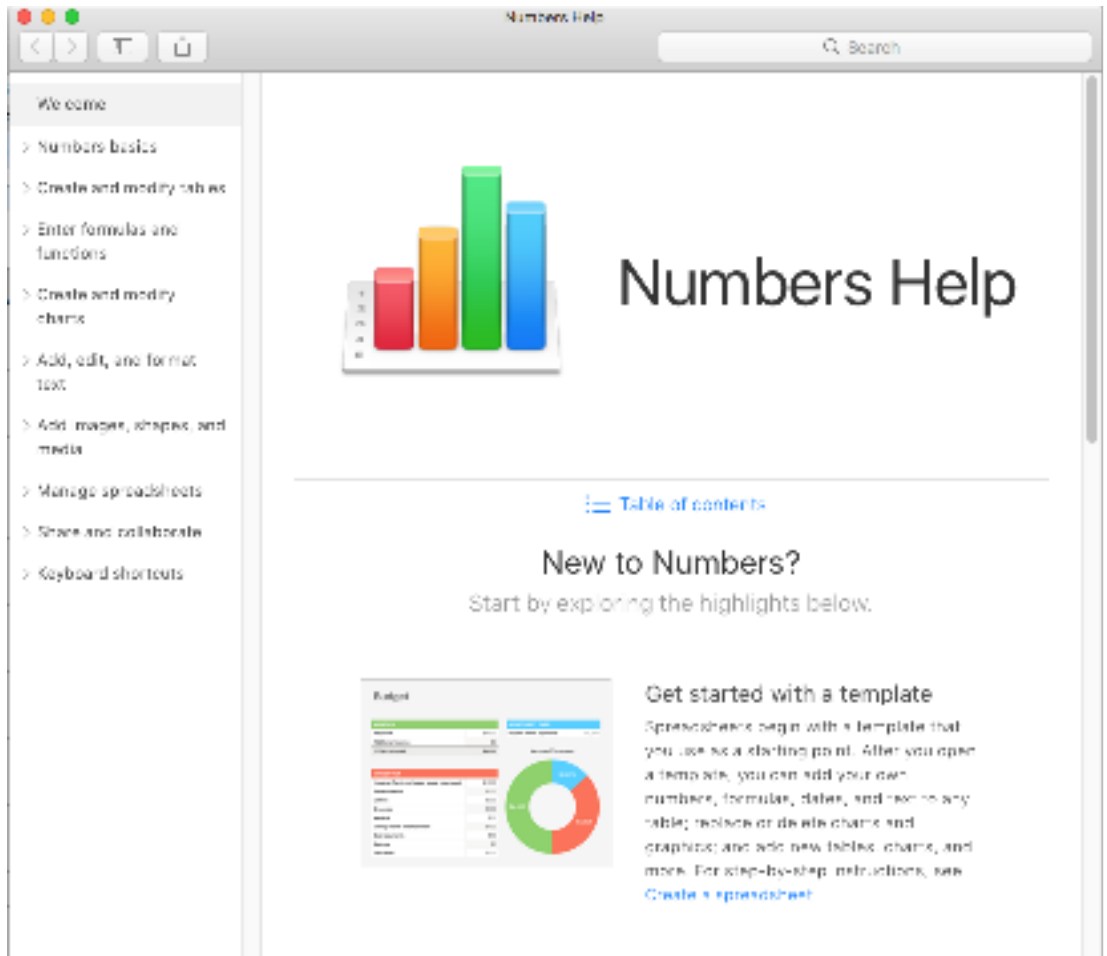
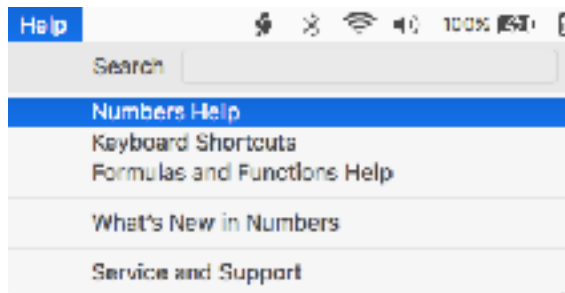
# Menu Bar—View



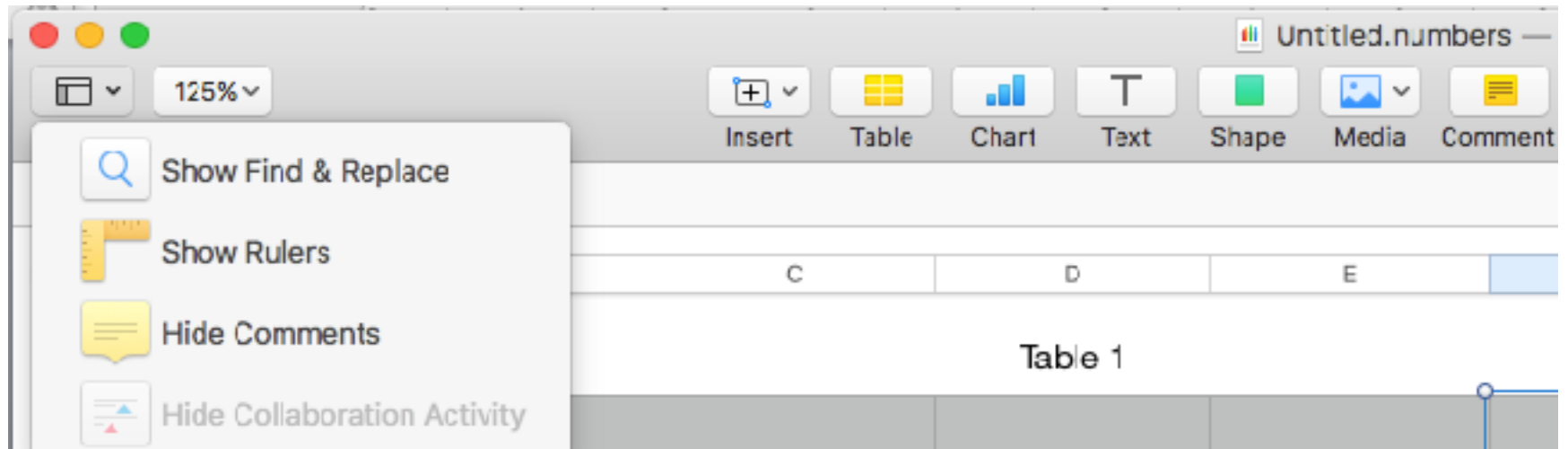
# Menu Bar—Share & Window



# Menu Bar—Help

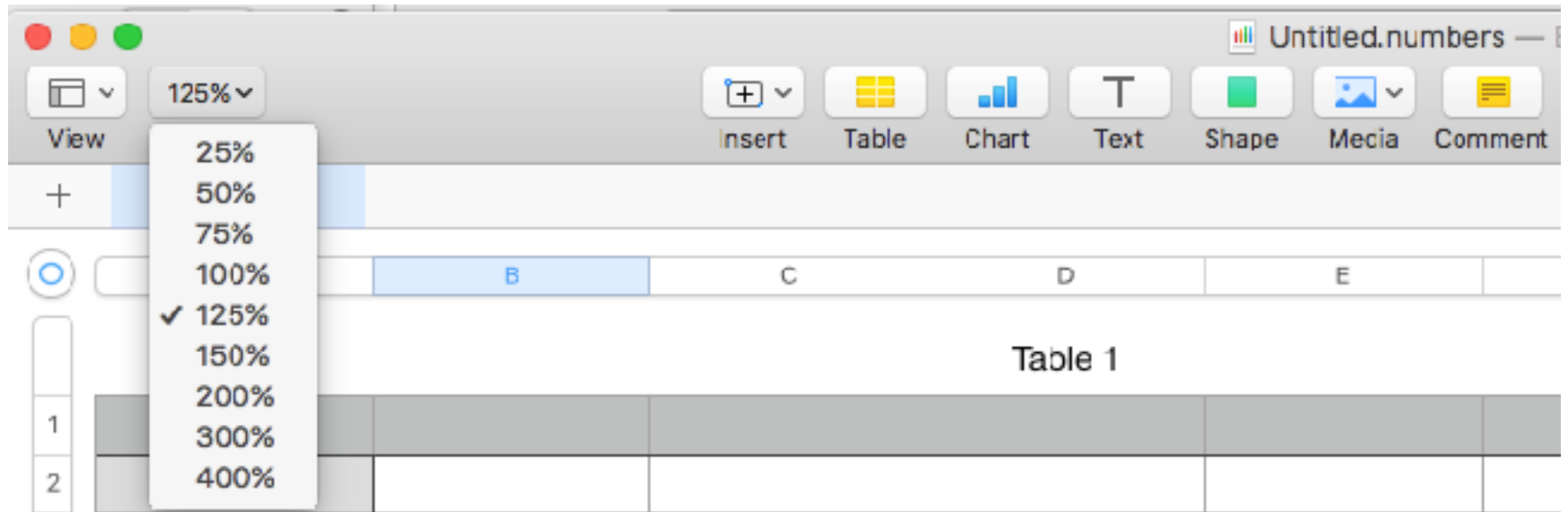


# Tool Bar—View

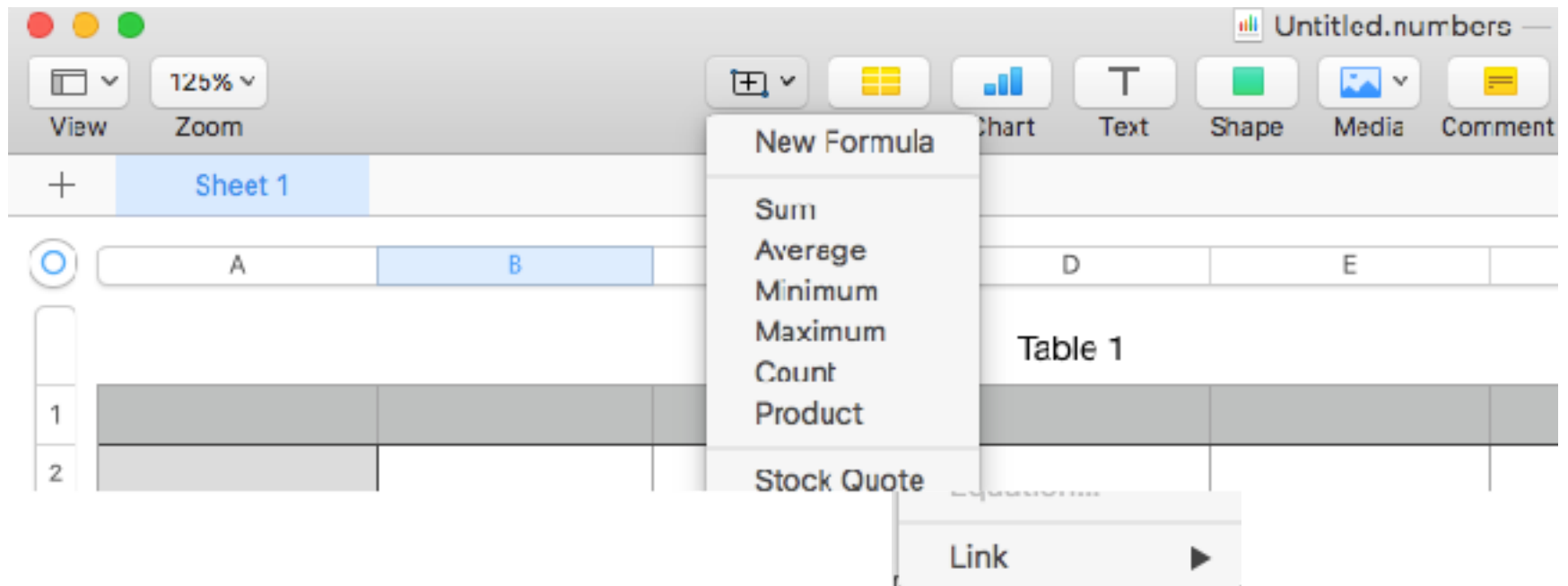




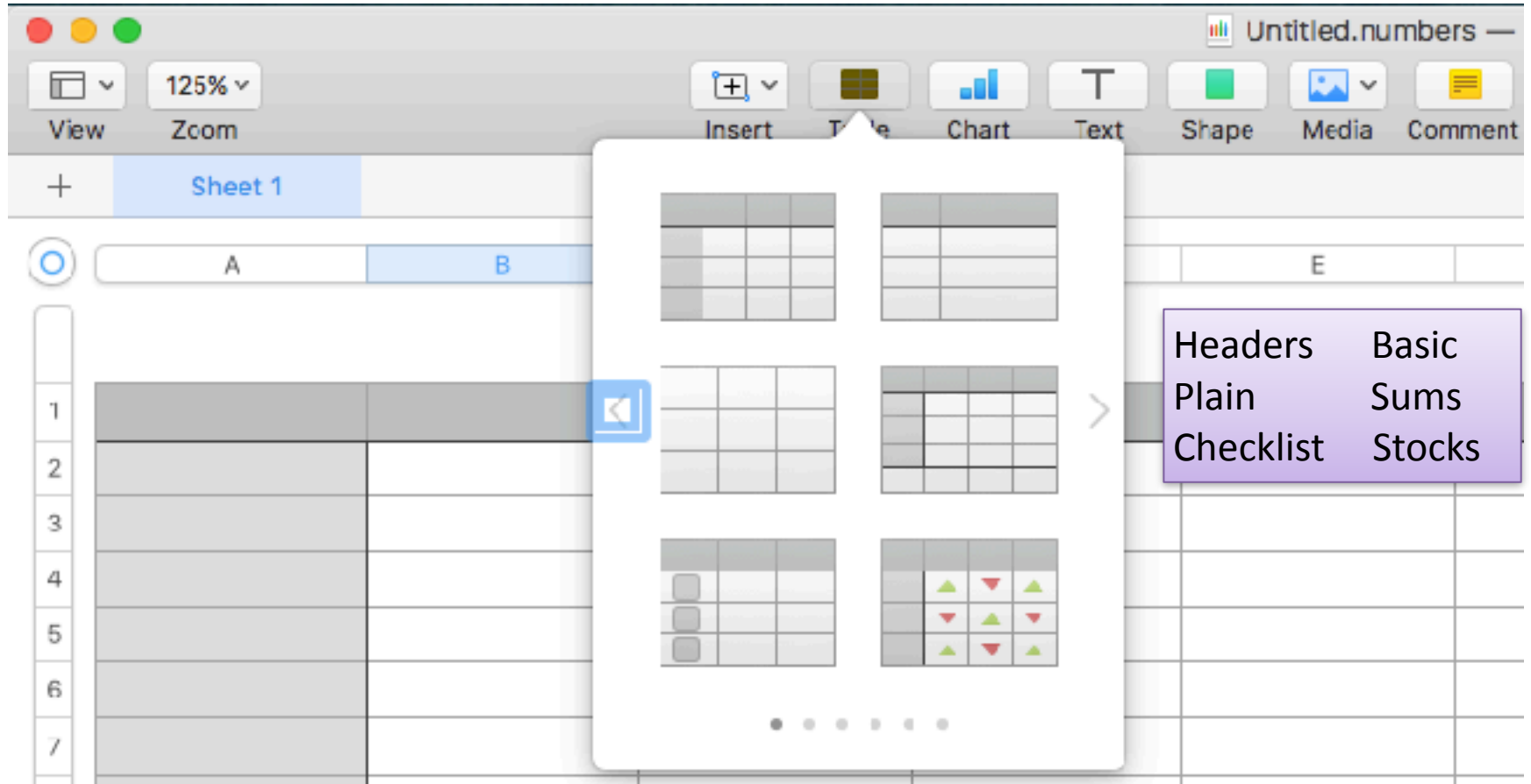
# Tool Bar—Zoom



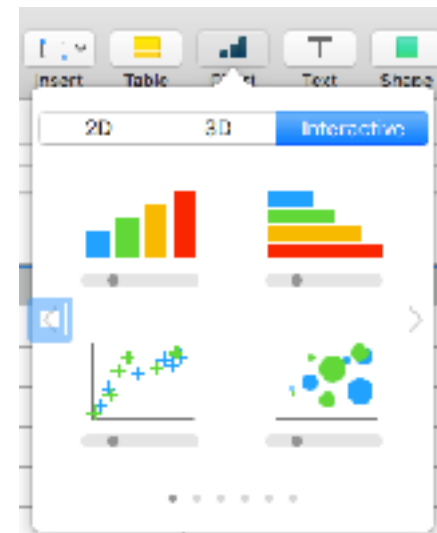
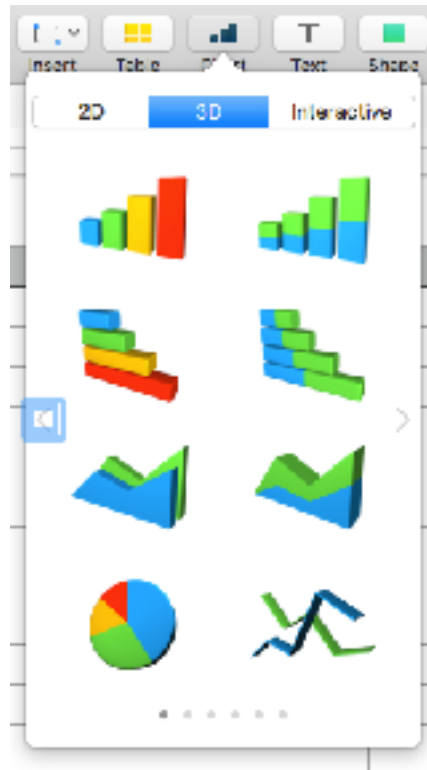
# Tool Bar—Insert



# Tool Bar—Table



# Tool Bar—Chart



# Tool Bar—Text

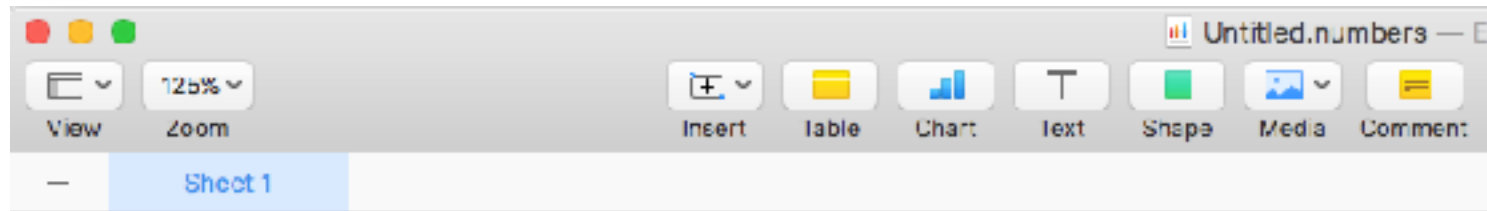
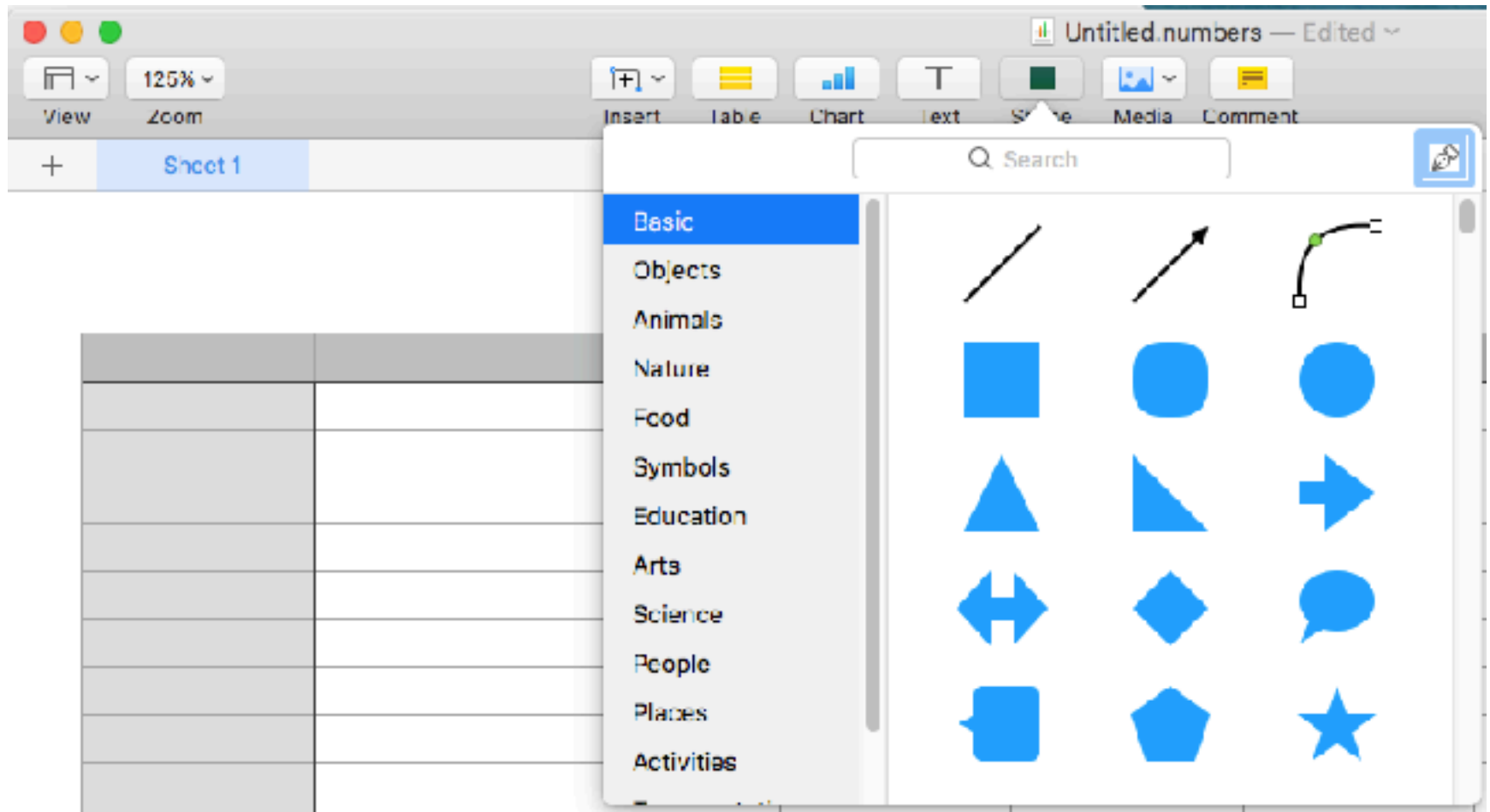


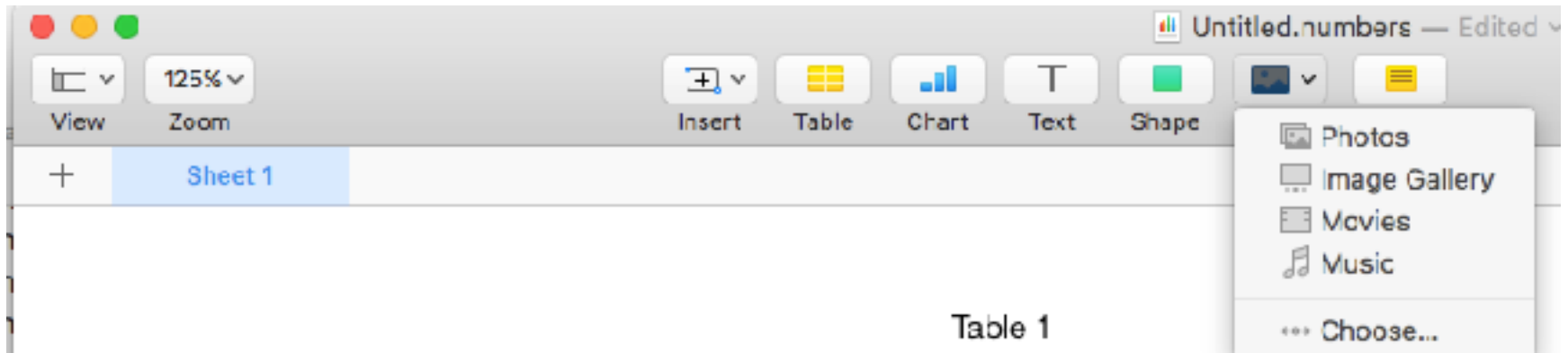
Table 1

[illegible]

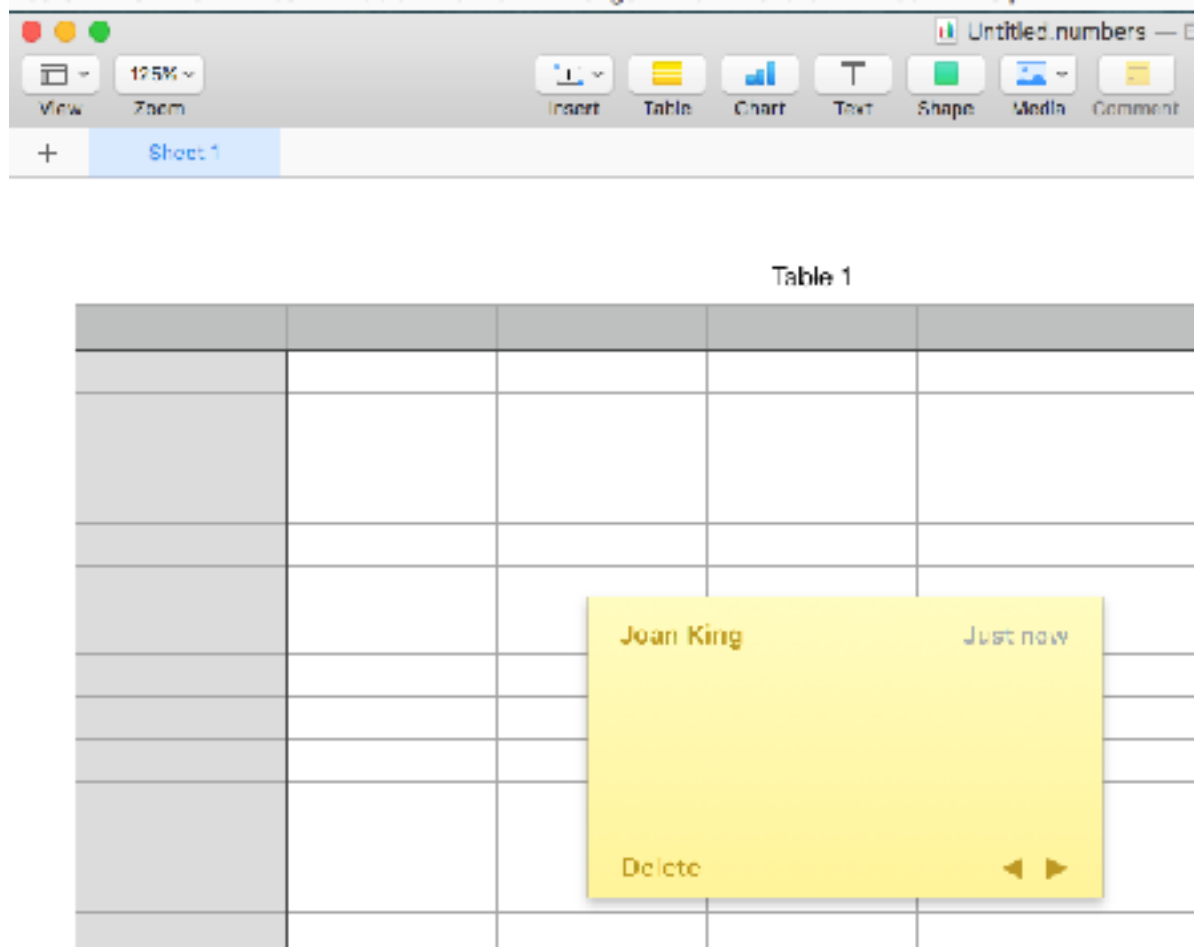
# Tool Bar—Shape



# Tool Bar—Media

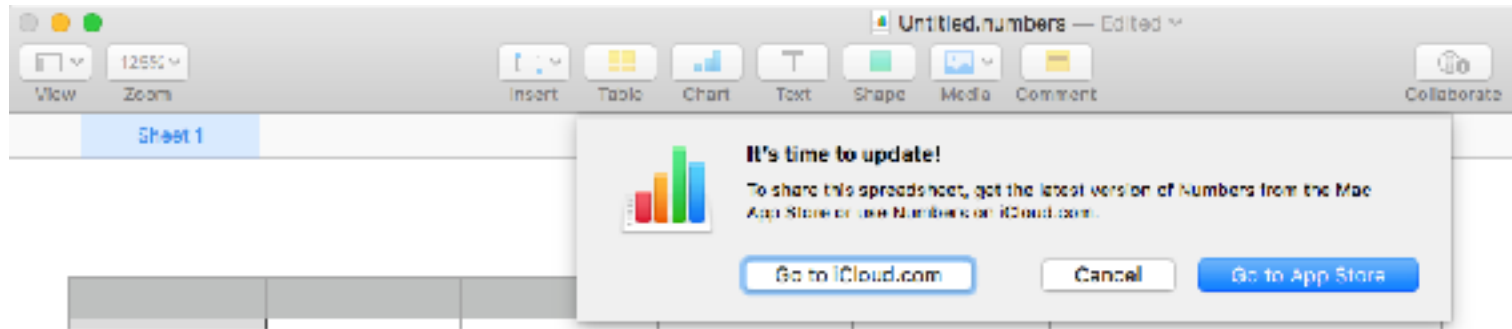


# Tool Bar—Comment

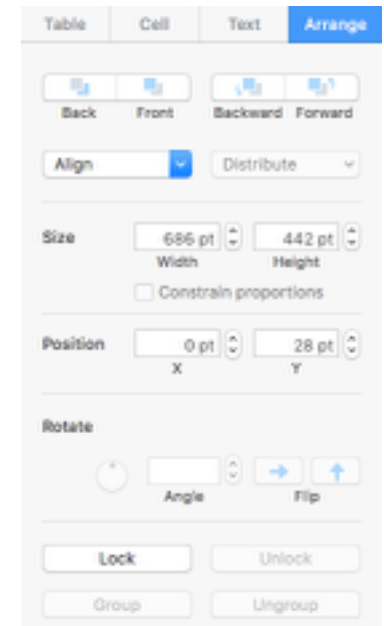
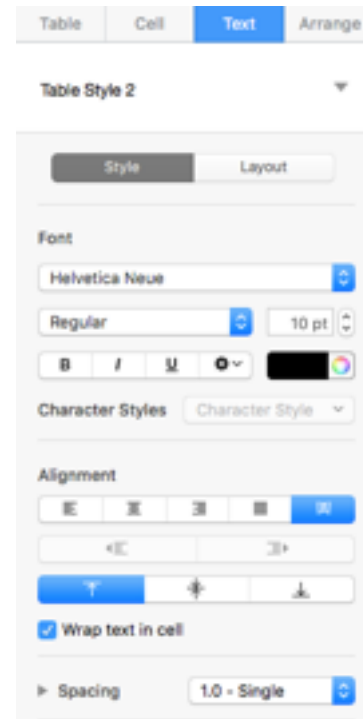
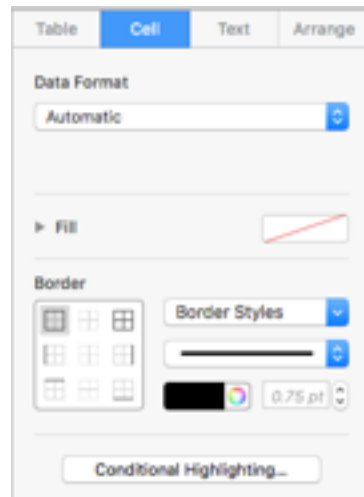




# Tool Bar—Collaborate



# Tool Bar—Format



# Tool Bar—Sort & Filter

Sort

Filter

Choose which columns to sort by.

Add a Column...

Sort Now

Sort Entire Table

⌵

Sort

Filter

Filters show rows that match the rules you specify and hide the rest.

Add a Filter...

# Numbers Demo

