

▼ Preparation ↘

▼ Better Display ↘

- ▶ ☐ Enable SCO 1920x1080
- ▶ ☐ Mirror internal display to virtual 1920x1080
- ▶ ☐ Mirror projector display to virtual to 960x540

▼ ☐ System Settings → Desktop Dock → Displays have separate spaces ↘

- ▶ Otherwise spaces have no menu bars
- ▶ ☐ **Requires logout**

▼ 3 (extra) spaces ↘

- ▶ GREEN → Excel
- ▶ BLUE → Numbers
- ▶ RED → Sheets ↘
- ▶ ☐ All 3 start open to first tab
- ▶ ☐ Moom if necessary

▼ Distractions ↘

- ▶ ☐ Finder → Settings → uncheck hard disks external disks

▼ Parallels Desktop ↘

- ▶ ☐ Presentation Mode
- ▶ ☐ Hide Desktop Items
- ▶ ☐ Quit WisprFlow
- ▶ ☐ Hide Dock

▼ ☐ Enable KeyScreen ↘

- ▶ ☐ My Neon
- ▶ ☐ Show function & command keys, also escape, delete

▼ **Intro** ↘

- ▶ Smarty Pants start your lists
- ▶ Small subset of what's cool
- ▼ Excel, Numbers, Sheets ↘
 - ▶ Excel first love but many like Numbers & Sheets
 - ▶ Each do better at some things, none do better than all
- ▼ Color-coded ↘
 - ▶ ^→ flip through

▼ Fill Down/Right ↴

▼ EXCEL ↴

- ▶ All spreadsheets - pattern matching - some better than others
- ▼ Drag bottom right corner ↴
 - ▶ White cursor → black
- ▶ Months - fill past 12
- ▼ Days - past 7 ↴
 - ▶ Undo
 - ▶ Double-click
 - ▶ Ooh - ahhh!
- ▼ 1 ↴
 - ▶ Fill → nope
 - ▶ Add 2
 - ▶ Select 1 & 2, drag or Double-click
- ▶ Q1 → works
- ▼ Bob 1 → works ↴
 - ▶ Drag right → Fill right works on all
- ▶ Make our own: pancakes, waffles, bacon

▼ NUMBERS ↴

- ▼ Months ↴
 - ▶ Try bottom right corner - nope
 - ▶ Hover to Drag yellow dot under/right of cell
 - ▶ Cursor changes double-arrow
- ▼ Move January into header ↴
 - ▶ No yellow dot!
- ▼ Monday ↴

- ▶ Double-click doesn't work
- ▶ 1 → have to add 2
- ▶ pancakes, waffles, bacon

▼ **SHEETS** ↴

- ▶ Months → same as Excel
- ▶ Days → Same
- ▶ 1 → have to add 2
- ▶ Q1 → Same
- ▶ Bob 1 → works
- ▶ pancakes, waffles, bacon

▼ **ABSOLUTE vs RELATIVE Cell References** ↘

- ▶ We're going to fill out a little spreadsheet to get reimbursed for mileage
- ▶ Pre-filled with miles driven, a spot for reimbursement, & fed reimbursement rate
- ▶ Will be filling data by dragging but mistakes will occur if we don't pay attention to abs vs rel

▼ **EXCEL** ↘

- ▶ 4 drives
- ▶ Don't want to type Drive 2, let's fill down
- ▼ Reimbursement = miles driven x reimbursement rate ↘
 - ▶ Click C2
 - ▶ Type =, click B2, type *, click E2, then enter
 - ▶ \$2.18
- ▼ Fill Down ↘
 - ▶ Why didn't work?
 - ▶ Double-click C2 again - says B2*E2
 - ▶ Double-click C3 - says B3*E3 - but rate is in E2
 - ▼ These are **relative** cell references, which change as you drag ↘
 - ▶ Good B2 changed to B3, but we want E2 as **absolute**
 - ▼ In C2: Want always E2, put \$ in front of E and in front of 2 ↘
 - ▶ Fill down, works
 - ▶ \$ means hold B still AND hold 2 still → always B2
 - ▶ Move rate around - still works (abs ref changes!)
 - ▶ Undo till relative ref

- ▼ Painstaking to type \$ 
 - ▶ Instead, cursor left, right, center, or selected, hit Fn-F4
 - ▶ Yay!
 - ▶ Sometimes want to hold column still but allow row to float
 - ▶ Select \$E\$2
 - ▶ Cycle Fn-F4 Explain

- ▼ Named cell 
 - ▶ Erase all reimburse
 - ▶ Upper left, type rate
 - ▶ $C2 = b2 * rate$
 - ▶ Fill down
 - ▶ boom

▼ **NUMBERS**

- ▶ Test 1 fill down
- ▼ Click C2, = click B2 
 - ▶ Named already - miles driven test1 (ooh ahhh)
 - ▶ *reimbursement rate test 1
- ▼ Before hitting enter 
 - ▶ See downward chevron
 - ▶ Preserve row/column
 - ▶ Check both
 - ▶ Green check
 - ▶ Double-click → See \$s
- ▶ Fill down
- ▶ Drag reimbursement rate
- ▶ More elegant to check boxes than arcane \$s

▼ SHEETS ↘

▼ Test 1 fill down ↘

- ▶ C2: =B2*E2

▼ TINY TEXT!!! ↘

- ▶ Cursor next to E2

- ▶ Let's try Fn-F4

- ▶ yay

▼ Enter ↘

- ▶ Once it suggested autofill

- ▶ Double-click corner

▼ CUSTOM FORMATTING ↘

▼ PROBLEM TO BE SOLVED ↘

- ▶ Easier to read with units but still numbers

▼ EXCEL ↘

- ▶ Driving reimbursement example
- ▼ We know what this means ↘
 - ▶ Make more clear to others
- ▼ Reimbursement - easy ↘
 - ▶ ribbon, number, \$ symbol
- ▼ Want miles to say "mi" after numbers ↘
 - ▼ Select 4 cells ↘
 - ▶ Menu bar → Format → Format Cells
 - ▶ Right-click → Format Cells
 - ▶ ⌘1
 - ▼ Number tab/Accounting ↘
 - ▶ Change to Custom
 - ▶ Type 0.00 to format to 2 decimals, then text you want to show " mi"
 - ▶ Note space before " mi" → See example?
 - ▶ Low res screen - can't see done - hit enter
- ▼ Reimb rate ↘
 - ▶ ⌘1
 - ▶ Custom
 - ▶ We want \$0.725/mi"
 - ▶ Easiest way - pick a currency line
 - ▶ Looks like glop - notice 0.00_, tells us 2 digits, second is negatives (we don't care)
 - ▶ change 0.00_ to 0.000_, add "/mi"

- ▶ Enter
- ▶ Looks more readable now!
- ▼ How to apply same custom format
 - ▶ select any cell, ¤1, custom, scroll to bottom
 - ▶ OR, paintbrush
- ▶ Numbers more intuitive!

▼ **NUMBERS**

- ▼ Miles
 - ▶ Paintbrush to open formatting → Cell tab
 - ▶ Data format dropdown → Create custom format...
 - ▼ Tokens for formats
 - ▶ Default no decimal, drag in .##
 - ▶ Add space mi with no quotes
 - ▶ Example just says "3 mi" - why no decimals?
 - ▶ Downward chevron → Show trailing zeros
 - ▶ !! Name: change custom format to miles
 - ▼ Select next cell
 - ▶ Data Format → miles - beautiful!
 - ▶ Edit custom format
- ▼ Reimbursement
 - ▶ Paintbrush to open formatting → Cell tab
 - ▶ Data format dropdown → custom
 - ▶ Currency \$ token to left
 - ▶ Decimal to right → dropdown add digit
 - ▶ type /mi
 - ▶ Name \$/mi
 - ▶ OK
- ▶ Same kind of steps but more intuitive than Excel

▼ SHEETS ↘

▼ Miles ↘

- ▶ custom pretty hidden
- ▶ Tap "123" in ribbon
- ▼ Custom Number Format ↘
 - ▶ Remembers custom formats (can't delete or edit)
 - ▶ GB is mine
 - ▶ Same as Excel, " mi"

▼ Reimbursement ↘

- ▶ 123 → custom format
- ▶ Same as Excel
- ▶ Choose 2-digit currency example, add 0, type "/mi"

▼ COPY/PASTE FORMAT ↘

▼ EXCEL ↘

▼ Reimbursement ↘

- ▶ paintbrush
- ▶ Click Miles cell
- ▶ Select reimbursement again
- ▶ Double-click paintbrush
- ▶ Click last two miles cells separately

▼ NUMBERS ↘

▼ Reimbursement ↘

- ▶ no paintbrush
- ▶ Format → Copy Style ⌘C
- ▶ new cell

- ▶ Format → Paste Style ⌘⇧V

▼ **SHEETS** ⌵

▼ Reimbursement ⌵

- ▶ paintbrush
- ▶ Click Miles cell
- ▶ Undo
- ▶ CAN'T double-click to paste lots of cells
- ▶ CAN use ⌘Y to apply to other cells
- ▼ Or ⌘C to copy cell (NOT ⌘⇧C - that opens web consol) ⌵
 - ▶ new cell → right-click paste special
 - ▶ format only or ⌘⇧V
 - ▶ do a couple of cells

▼ **CONCATENATE** ↴

▼ **PROBLEM TO BE SOLVED** ↴

- ▶ List of attendees with user number, last name, full name
- ▶ We want Full Name
- ▶ Formula we'll use is called concatenate
- ▶ Means "link (things) together in a chain or series"

▼ **EXCEL** ↴

- ▶ Full name next to Corky
- ▶ =con wait for spell
- ▼ =CONCATENATE(B2,A2) ↴
 - ▶ oh no - it smashed fn and ln together
- ▶ Add space explicitly
- ▶ =CONCATENATE(B2," ",A2)
- ▶ dbl-click corner fill down
- ▶ Yay!

▼ **NUMBERS** ↴

- ▶ Full name next to Corky
- ▶ =con wait for spell
- ▶ Offers "string" as the first argument
- ▶ fn," ",ln
- ▶ Creates parentheses

▼ **SHEETS** ↴

- ▶ Same dance - =CONCATENATE(B2," ",A2)
- ▶ MAY autofill!

▼ VLOOKUP ↘

▼ PROBLEM TO BE SOLVED ↘

- ▶ Giant spreadsheet
- ▶ Need to look up something, return value in same row
- ▶ We'll look up user number, return who has that user number
- ▶ VLOOKUP stands for Vertical lookup (there's HLOOKUP too)

▼ EXCEL ↘

- ▶ Last Name cell
- ▶ =VLOOKUP(
 - ▼ Excel helps: ↘
 - ▶ lookup_value, table_array, col_index_num, [range_lookup]
 - ▼ Lookup value: user number F2 ↘
 - ▶ Freeze column \$F2 so when we fill right to look up first name and fullname
 - ▼ Table array: ↘
 - ▶ drag columns A:D but freeze both \$A:\$D
 - ▼ Col_index_num ↘
 - ▶ could type 2 but wouldn't fill right
 - ▶ put in COLUMN(B2)
 - ▼ Range Lookup: ↘
 - ▶ True means your data is sorted, false is unsorted
 - ▶ skip it = true = wrong
 - ▶ False
 - ▼ Finds Flanagan! ↘

- ▶ fill down
- ▶ fill right

▼ **NUMBERS** ↘

- ▶ Last name cell
- ▶ =VLOOKUP)
- ▼ Numbers helps: ↘
 - ▶ search-for,column-range,return-column,[is-sorted]
 - ▶ dark hint is selected one
 - ▼ search for ↘
 - ▶ F2 → dropdown: preserve column
 - ▼ column-range ↘
 - ▶ A:D → dropdown preserve start/end column
 - ▼ return-column ↘
 - ▶ COLUMN(B2)
 - ▼ close-match ↘
 - ▶ Exact match (FALSE) - duh!
 - ▶ Fill down/right

▼ **SHEETS** ↘

- ▶ Last name cell
- ▶ =VLOOKUP)
- ▼ Sheets helps in WEE TINY TEXT: ↘
 - ▶ search-key,range,index,close-match
 - ▶ dark hint is selected one
 - ▼ search-key ↘
 - ▶ F2 → \$F2
 - ▼ range ↘

- ▶ A:D → \$A:\$2

- ▼ index 

- ▶ COLUMN(B2)

- ▼ close-match 

- ▶ FALSE - duh!

- ▶ Fill down/right

- ▼ Dropdown menu pick like I did for QFD ▼
 - ▼ What if you want to restrict users of your spreadsheet to specific options? ▼
 - ▶ We can create a dropdown menu they must use
 - ▶ Hi, my name is Allison Sheridan and I'm a control freak
 - ▶ Example is choosing a menu item when you're ordering lunch for a group
- ▼ EXCEL ▼
 - ▶ Data → Validation in Excel
 - ▶ On the right I've listed the menu options as chicken, fish, or vegetarian
 - ▶ On the left I want them to choose their selection
 - ▼ Select blank cell below ▼
 - ▼ Menu bar → Data → Validation... ▼
 - ▼ Settings Tab ▼
 - ▶ Allow: pull down to List
 - ▶ Tap the little spreadsheet selection button
 - ▶ choose list of foods
 - ▼ Input Message ▼
 - ▶ Title: Use dropdown
 - ▼ Input Message ▼
 - ▶ Use the dropdown to choose your food - no exceptions!
 - ▼ Error Alert ▼
 - ▶ Title: Bad!
 - ▼ Error Message ▼
 - ▶ What did I tell you?

- ▶ Style: leave as stop

▼ NUMBERS ↴

- ▶ Even easier
- ▶ Select A2
- ▶ Open paintbrush
- ▶ Cell tab → Data Format
- ▼ Change to popup menu ↴
 - ▶ shows 3 options
 - ▶ set to chicken/fish/veg
- ▶ Change start w 1st item to blank
- ▶ Easy! but no error or informational message possible
- ▶ But can't type anything in the cell

▼ SHEETS ↴

- ▶ Select A2
- ▶ Data menu → Data validation
- ▶ Could manually set options
- ▼ or change Criteria to dropdown from range ↴
 - ▶ Select empty line with spreadsheet symbol
 - ▶ may need to move popup
 - ▶ select chicken to veg
- ▼ change color of options ↴
 - ▶ show
- ▶ Allow multiple