

# **Excel Module 3b**

## **Performing Calculations for Data Analysis**

# REVIEW: FUNCTION List = 10

**= SUM**

**=COUNT**

**=COUNTA**

**=AVERAGE**

**=MIN**

**=MEDIAN**

**=MAX**

**=NOW ( )**

**=IF**

**=TODAY( )**

# Student Learning Outcomes

## *EXAMPLE: Excel Lesson 04 / Juice (Practice)*

- Use **Auto Fill Handle** (Page EX156-157)
  - For Numbers or Dates

# Student Learning Outcomes

- **RELATIVE** Cell Reference

- When a formula is copied from one location to another location, the formula will **ADJUST** to the new location.

- **\$ABSOLUTE\$** Cell Reference When a formula is copied from one location to another location, the formula will **NOT CHANGE**.

- Examples of an **\$ABSOLUTE\$** cell reference: **\$K\$2**

Shortcut  
key: **F4**



# Writing Formulas

**In your book #5 - In cell G6**, calculate the total hours worked on the first day, which is *equal to the difference between cell F6 and E6 multiplied by 24*.

$$=(F6 - E6) * 24$$

# Writing Formulas

**In your book #6** - Carol will get overtime wages when she works more than eight hours in a day. Calculate the non-overtime hours **in cell H6** by *using the MIN function to return the minimum of the value in cell G6 and the value 8.*

**=MIN(G6,8)**

# Writing Formulas

**In your book #7 - In cell I6**, calculate the amount of overtime hours by *using the IF function to test whether cell G6 is greater than 8. If it is, return the value cell G6 minus 8; otherwise, return the value 0.*

**See the next slide for formula.**

# Writing Formulas

In cell I6, click the IF Function button

	Enter the following values
Logical_test	$G6 > 8$
Value_if_true	$G6 - 8$
Value_if_false	0

# Writing Formulas

**In your book #8 - In cell J6**, calculate the salary due on the first day.

The salary is **equal to** the Straight Time worked in **H6 multiplied** by the hourly rate in cell **\$B\$6 plus** the Overtime in **I6 multiplied** by the hourly rate in **\$B\$6 times** 1.5

**See the next slide for formula.**

# Writing Formulas

In cell J6, enter the following:

**=(H6 \* \$B\$6) + (I6 \* \$B\$6 \* 1.5)**

(Carol will receive time-and-a-half for each overtime hour.) Use an absolute reference in cell **\$B\$6**. (Shortcut key – F4)

**\*\*CONTINUE in your Book #9 & #10 (Page EX183).**

**\*\*DO NOT USE\*\*** the **VLOOKUP** Function

Just look at the **Federal Tax Rate Table**

**In your book #11** - In Cell B17, calculate the amount of federal tax by **multiplying** the Total Pay in cell **B14** by the Federal Tax Rate (Look at the Federal Tax Rate Table), **click on N6** (Single, 1 Withholding)

In B17, enter **= B14 \* N6**

**\*\*CONTINUE in your Book #12 (Page EX183).**

**\*\*CONTINUE in your Book #13 (Page EX184).**

**\*\*DO NOT USE\*\*** the **VLOOKUP** Function

**In your book #14** - In Cell B20, calculate the amount of Georgia Income Tax by **multiplying** the Total Pay in cell **B14** to the State Tax Rate (Look at the State Tax Rate Table), **click on N12** (Single, 1 Withholding)

In B20, enter **= B14 \* N12**

**\*\*CONTINUE in your Book #15, #16 (Page EX184).**