



UNIT

A

Excel 2010

Microsoft Excel 2010- Illustrated

Unit A: Getting Started with Excel 2010

Objectives

- Understand spreadsheet software
- Tour the Excel 2010 window
- Understand formulas
- Enter labels and values and use the Sum button

Objectives

- Edit cell entries
- Enter and edit a simple formula
- Switch worksheet views
- Choose print options

Understanding Spreadsheet Software

- Microsoft Excel is an electronic spreadsheet program
 - An **electronic spreadsheet** program allows you to perform numeric calculations
 - The spreadsheet is called a **worksheet**
 - Individual worksheets are stored in a **workbook** which is the Excel file

Understanding Spreadsheet Software

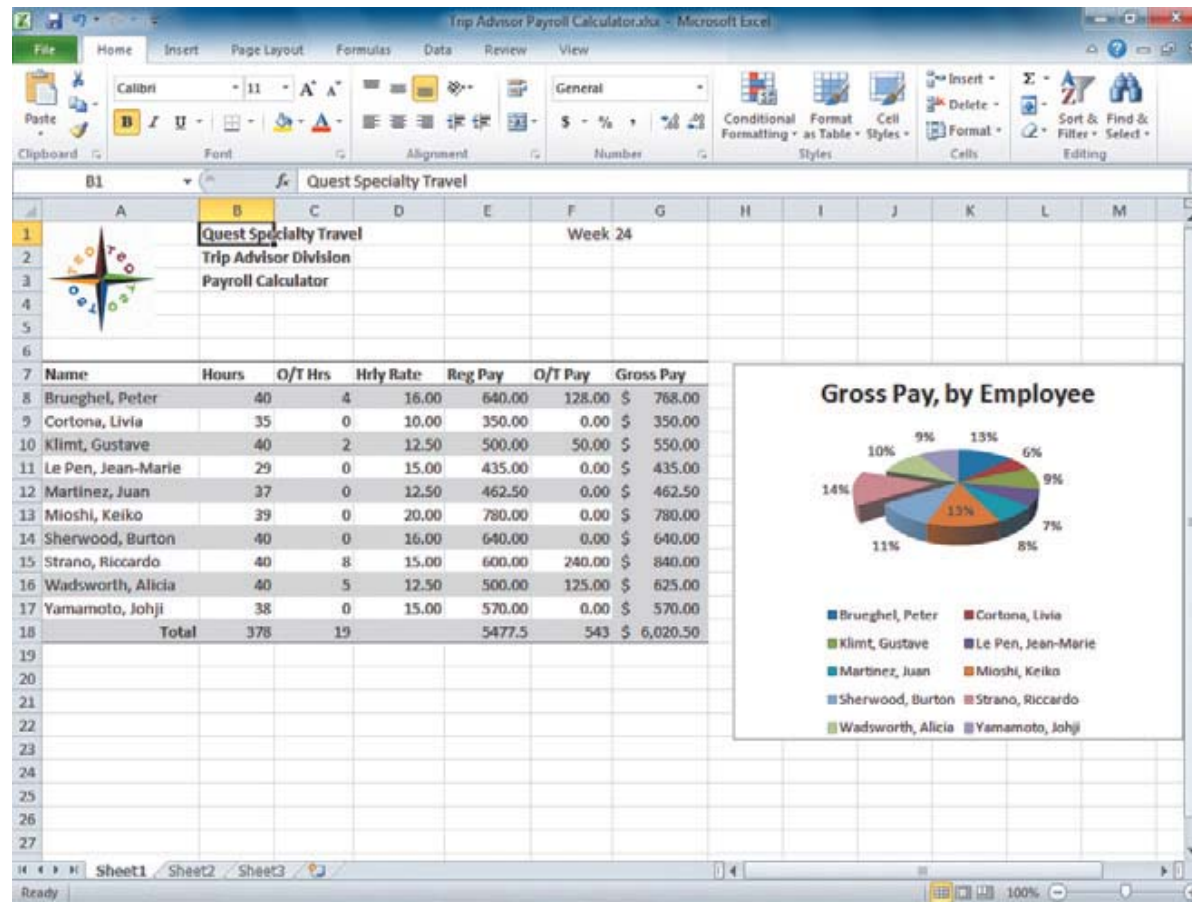
- Advantages of using Excel
 - Enter data quickly and accurately
 - Recalculate data easily
 - Perform what-if analysis

Understanding Spreadsheet Software

- Advantages of using Excel
 - Change the appearance of information
 - Create charts
 - Share information
 - Build on previous work

Understanding Spreadsheet Software

Sample worksheet with chart



Touring the Excel 2010 Window

- The **Name box** displays the active cell address
- The **formula bar** allows you to enter or edit data in the worksheet
- The intersection of a row and a column is called a **cell**

Touring the Excel 2010 Window

- Each cell has its own unique location called a **cell address**
 - A cell address is identified by its coordinates (A1)

Touring the Excel 2010 Window

- The cell in which you are working is called the **active cell**
- **Sheet tabs** let you switch from sheet to sheet in a workbook

Touring the Excel 2010 Window

- The **status bar** provides a brief description of the active command or task in progress
- The **mode indicator** provides additional information about certain tasks

Touring the Excel 2010 Window

- A selection of two or more cells such as B5:B14 is called a **range**

Cell Range

	A	B	C	D	E	F	G	H	I	J	K
1	Quest Specialty Travel		Week 24								
2	Trip Advisor Division		Payroll Calculator								
3											
4	Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay				
5	Brueghel, Pieter	40	4	16	640	128					
6	Cortona, Livia	35	0	10	350	0					
7	Klimt, Gustave	40	2	12.5	500	50					
8	Le Pen, Jean-Marie	29	0	15	435	0					
9	Martinez, Juan	37	0	12.5	462.5	0					
10	Mioshi, Keiko	39	0	20	780	0					
11	Sherwood, Burton	40	0	16	640	0					
12	Strano, Riccardo	40	8	15	600	240					
13	Wadsworth, Alicia	40	5	12.5	500	125					
14	Yamamoto, Iohji	38	0	15	570	0					
15											
16											
17											

Touring the Excel 2010 Window

Open workbook

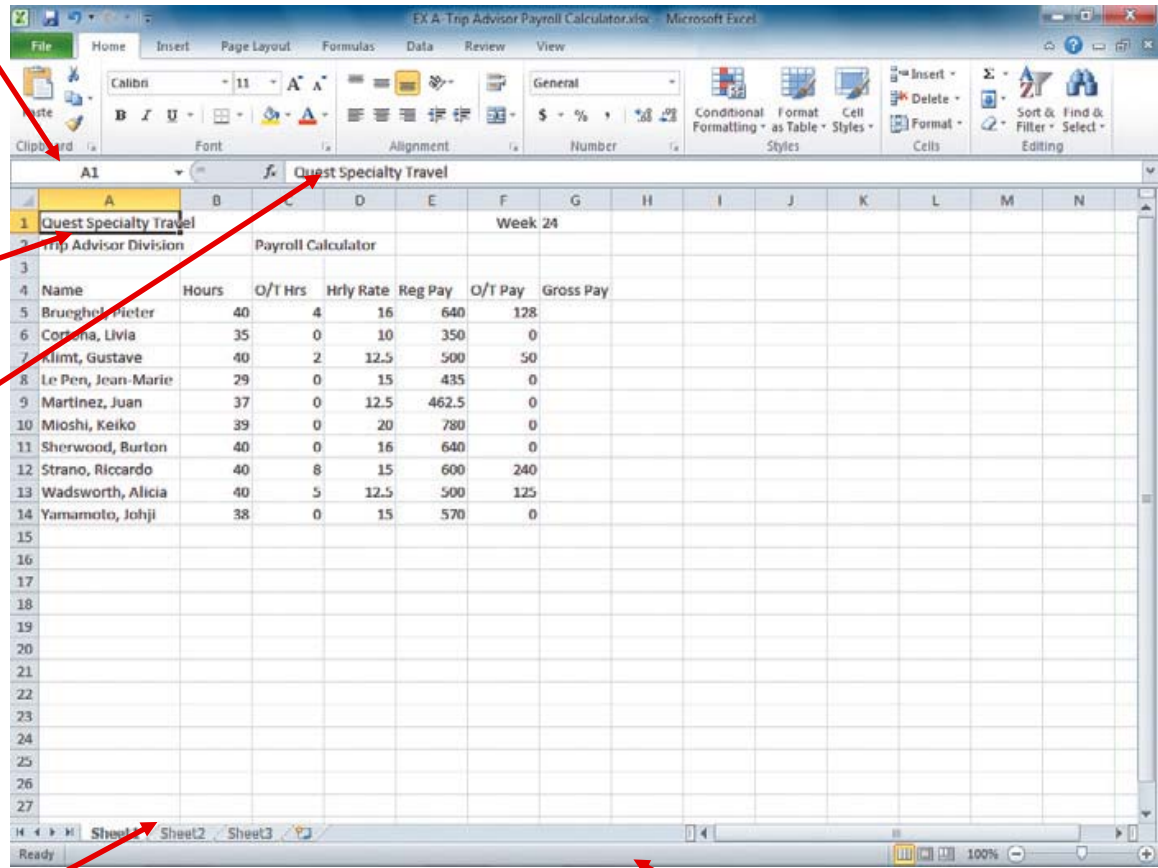
Name box and current cell address

Cell pointer

Formula bar

Sheet tabs

Status bar



Understanding Formulas

- **Formulas** are equations in a worksheet
- Excel formulas allow users at every level of mathematical expertise to make calculations with accuracy

Understanding Formulas

- When creating calculations in Excel, it is important to:
 - Know where the formulas should be
 - Know exactly what cells and arithmetic operations are needed

Understanding Formulas

- When creating calculations in Excel, it is important to:
 - Create formulas with care
 - Use cell references rather than values
 - Determine what calculations will be needed

Understanding Formulas

Viewing a Formula

Formula appears in formula bar

	A	B	C	D	E	F	G	H	I	J	K
1	Quest Specialty Travel					Week 24					
2	Trip Advisor Division		Payroll Calculator								
3											
4	Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay				
5	Brueghel, Pieter	40	4	15	640	128					
6	Cortona, Livia	35	0	10	350	0					
7	Klimt, Gustave	40	2	12.5	500	50					
8	Le Pen, Jean-Marie	29	0	15	435	0					
9	Martinez, Juan	37	0	12.5	462.5	0					
10	Mioshi, Keiko	39	0	20	780	0					
11	Sherwood, Burton	40	0	16	640	0					
12	Strano, Riccardo	40	8	15	600	240					
13	Wadsworth, Alicia	40	5	12.5	500	125					
14	Yamamoto, Iohji	38	0	15	570	0					
15											

Result of formula

Understanding Formulas

Excel arithmetic operators

operator	purpose	example
+	Addition	=A5+A7
-	Subtraction or negation	=A5-10
*	Multiplication	=A5*A7
/	Division	=A5/A7
%	Percent	=35%
^ (caret)	Exponent	=6^2 (same as 6 ²)

Entering Labels and Values and Using the Sum Button

- **Labels** contain text and numerical information not used in calculations
 - Labels help you identify data in worksheet rows and columns
 - You should enter all the labels first before entering other content
 - An example of a label is the word **Total** in cell A15

Entering Labels and Values and Using the Sum Button

- **Values** are numbers, formulas, and functions that can be used in calculations
 - An example of a number value is 40 in cell B5
 - An example of a formula value is $=C5*(2*D5)$ in cell F5

Entering Labels and Values and Using the Sum Button

- A **function** is a built-in formula
 - A function includes **arguments**, the information necessary for the calculation
 - An example of a function value is `=SUM(B5:B14)` in cell B15

Entering Labels and Values and Using the Sum Button

- Clicking the Sum button sums the adjacent range above or to the left, though you can adjust the range
- The fill handle fills cells based on the first number sequence in the range

Entering Labels and Values and Using AutoSum

Creating a formula using the AutoSum button

Formula

AutoSum button

Fill button

Cells included in formula

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Quest Specialty Travel					Week 24							
2	Trip Advisor Division		Payroll Calculator										
3													
4	Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay						
5	Brueghel, Pieter	40	4	16	640	128							
6	Cortona, Livia	35	0	10	350	0							
7	Klimt, Gustave	40	2	12.5	500	50							
8	Le Pen, Jean-Marie	29	0	15	435	0							
9	Martinez, Juan	37	0	12.5	462.5	0							
10	Mioshi, Keiko	39	0	20	780	0							
11	Sherwood, Burlon	40	0	16	640	0							
12	Strano, Riccardo	40	8	15	600	240							
13	Wadsworth, Alicia	40	5	12.5	500	125							
14	Yamamoto, Johji	38	0	15	570	0							
15													
16													
17													

Editing Cell Entries

- You can change, or **edit**, the contents of an active cell at any time
- To edit the contents of the active cell:
 - Double-click the cell, or
 - Click in the formula bar, or
 - Just start typing
- Excel switches to Edit mode when you are making cell entries

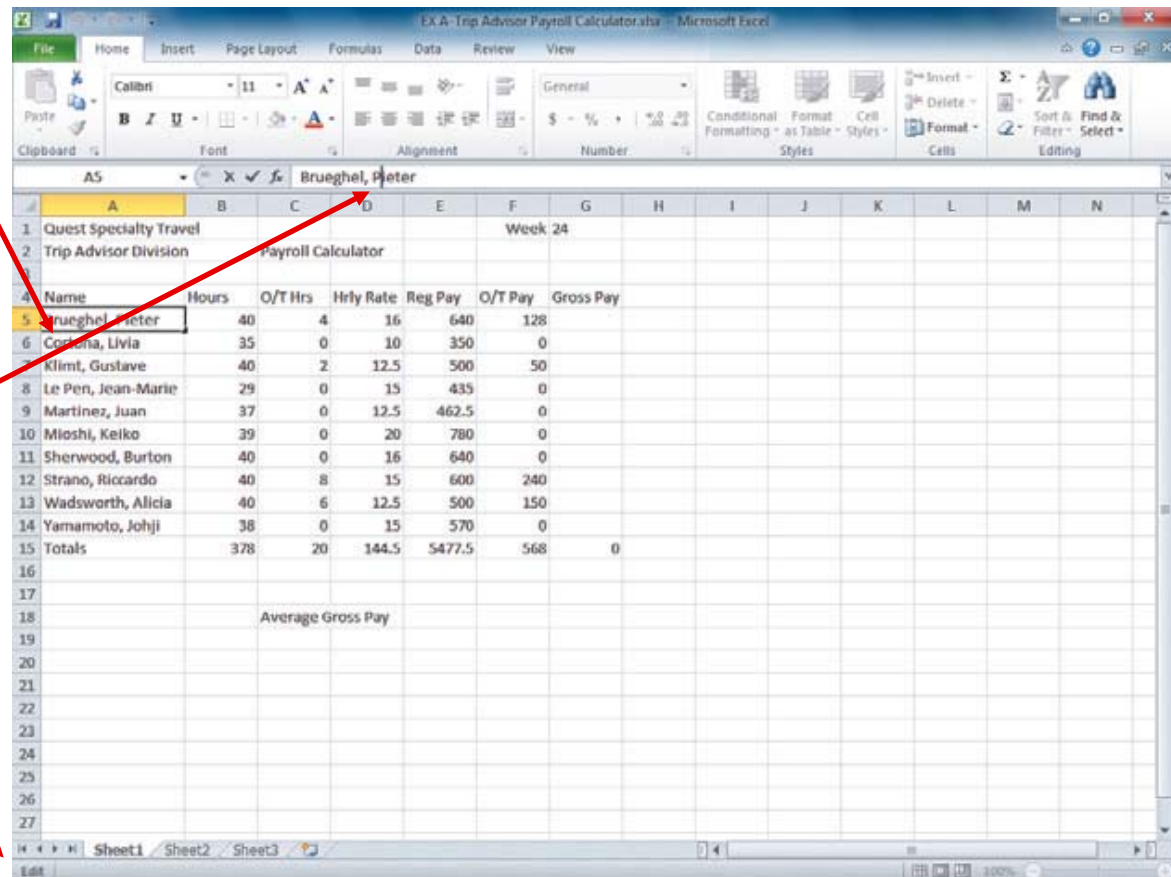
Editing Cell Entries

Worksheet in Edit mode

Active cell






Insertion point

Mode indicator



Editing Cell Entries

Common pointers in Excel

name	pointer	use to
Normal		Select a cell or range; indicates Ready mode
Copy		Create a duplicate of the selected cell(s)
Fill handle		Create an alphanumeric series in a range
I-beam		Edit contents of formula bar
Move		Change the location of the selected cell(s)

Entering and Editing a Simple Formula

- Formulas start with the equal sign (=), also called the **formula prefix**
- **Calculation operators** in formulas indicate what type of calculation you want to perform

Entering and Editing a Simple Formula

- Arithmetic operators perform mathematical calculations such as adding and subtracting
 - Examples of arithmetic operators are
+ - * / % ^

Entering and Editing a Simple Formula

- Comparison operators compare values for the purpose of true/false results
- Examples of comparison operators are

= > < >= <= <>

Entering and Editing a Simple Formula

- Text concatenation operators join strings of text in different cells
 - An example of a text concatenation operator is &

Entering and Editing a Simple Formula

- Reference operators enable you to use ranges in calculations
 - Examples of reference operators are : , (space)

Switching Worksheet Views

- You can change your view of the worksheet window by using either:
 - View tab on the Ribbon
 - View buttons on the status bar

Switching Worksheet Views

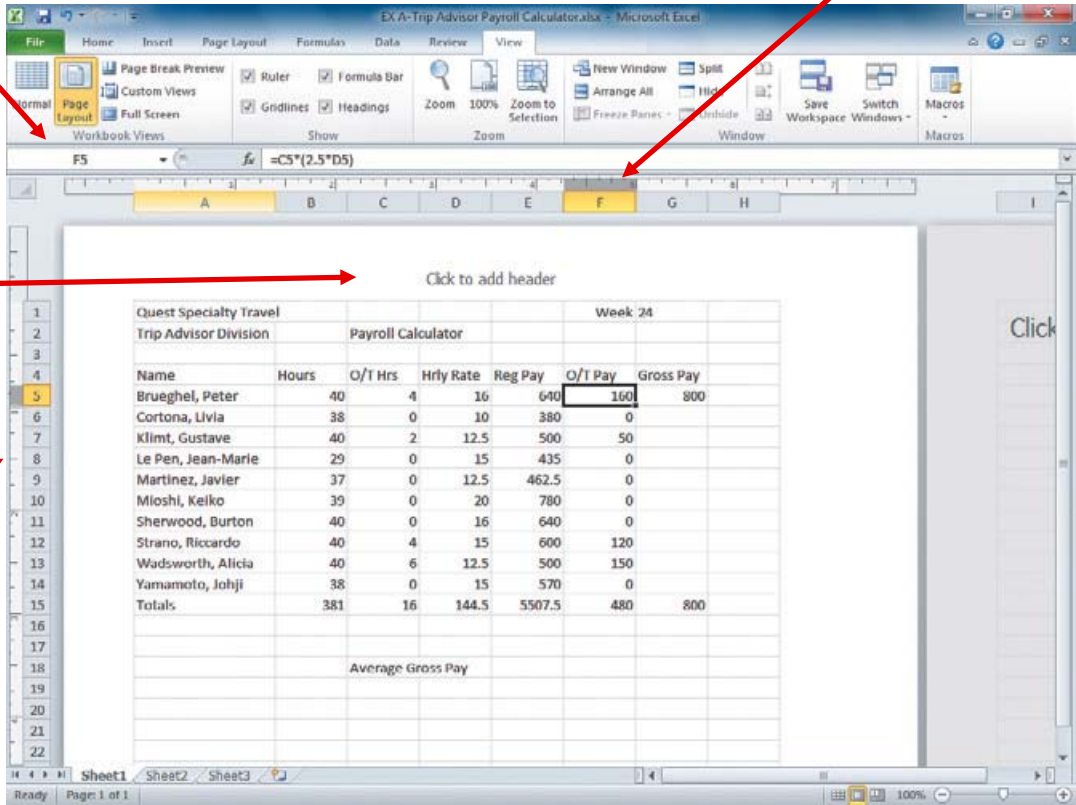
- **Normal view** shows the worksheet without including headers and footers or tools like rulers and a page number indicator

Switching Worksheet Views

- **Page Layout View** provides a more accurate view of how a worksheet will look when printed
 - It shows page margins, headers and footers, rulers, etc.

Switching Worksheet Views

Page Layout View

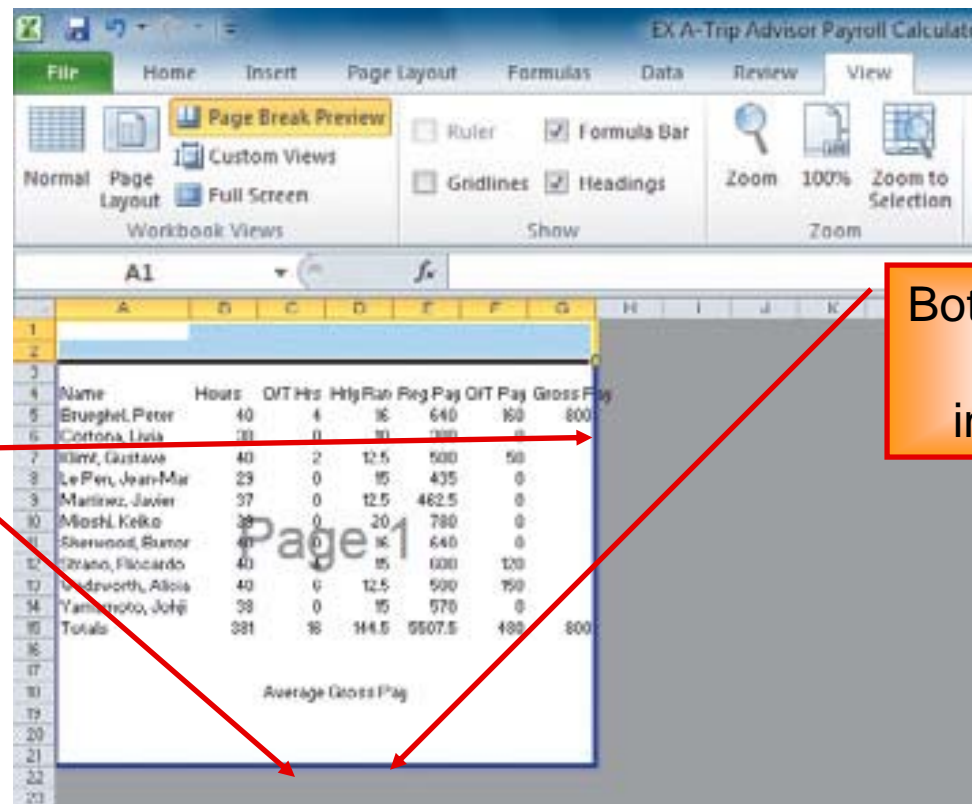


Switching Worksheet Views

- **Page Break Preview** displays a reduced view of each page of the worksheet, along with page break indicators

Switching Worksheet Views

Page Break Preview



Blue outline indicates print area

Bottom page break indicator

Choosing Print Options

- You can see how a worksheet would look when printed using:
 - Page Layout tab
 - The dotted line indicates the **print area**, the area to be printed
 - Print Preview
 - You can print from this view by clicking the Print button on the Ribbon

Choosing Print Options

- Page Layout tab
 - Page Setup group
 - Print orientation: **landscape** or **portrait**
 - Scale to Fit group
 - Sheet Options group

Choosing Print Options

Worksheet with Portrait orientation

Quest Specialty Travel Trip Advisor Payroll Calculator Week 24

Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay
Brueghel, Peter	40	4	16	640	160	800
Cortona, Livia	38	0	10	380	0	0
Klimt, Gustave	40	2	12.5	500	50	0
Le Pen, Jean-Marie	29	0	15	435	0	0
Martinez, Javier	37	0	12.5	462.5	0	0
Mioshi, Keiko	39	0	20	780	0	0
Sherwood, Burton	40	0	16	640	0	0
Strano, Riccardo	40	4	15	600	120	0
Wadsworth, Alicia	40	6	12.5	500	150	0
Yamamoto, Johji	38	0	15	570	0	0
Totals	381	16	144.5	5507.5	480	800
Average Gross Pay						
Your Name						

Dotted line surrounds print area

Choosing Print Options

- Printing in **Backstage view** lets you choose the number of copies, the printer, etc.

Choosing Print Options

Worksheet with Portrait orientation

The screenshot shows the Print dialog box in Microsoft Excel 2010. The dialog is titled "Print" and includes a "Copies" field set to 1. Below this, the "Printer" section shows "Brother HL-2170W series" as the active printer. The "Settings" section includes options for "Print Active Sheets", "Pages" (1 to 1), "Print One Sided", "Collated", "Portrait Orientation", "Letter" paper size, "Normal Margins", and "No Scaling".

Callouts from orange boxes on the left point to the following elements:

- Number of copies:** Points to the "Copies" field.
- Print button:** Points to the "Print" button.
- Active printer:** Points to the printer name "Brother HL-2170W series".
- Pages to print:** Points to the "Pages" field.
- Print scaling:** Points to the "No Scaling" option.

The background shows a worksheet titled "Trip Advisor Payroll Calculator" with a table of employee data:

Name	Hours	O/T Hrs	Hourly Base	Reg Pay	O/T Pay	Gross Pay
Brunell, Peter	40	4	15	640	160	800
Carlton, Uria	38	0	30	960	0	
Clare, Gustavo	40	2	12.5	500	30	
De Ben, Jean-Marie	35	0	15	450	0	
Marinez, Javier	37	0	12.5	462.5	0	
Misaki, Keiko	30	0	20	780	0	
Shenwood, Burton	40	0	36	1440	0	
Staves, Ricardo	40	4	15	600	120	
Wadsworth, AScia	40	0	12.5	500	150	
Yamamoto, Jody	38	0	15	570	0	
Totals	381	16	\$44.5	2907.5	480	800
Average Gross Pay						

Summary

- Understand spreadsheet software
- Tour the Excel 2010 window
- Understand formulas
- Enter labels and values and use the Sum button

Summary

- Edit cell entries
- Enter and edit a simple formula
- Switch worksheet views
- Choose print options