## 1. How are Pivot Tables used to filter data?

- Pivot Tables are used to filter data by allowing users to rearrange and summarize information from a dataset.
- You can filter data in a Pivot Table by dragging and dropping fields into the "Filters" area.
- \* This enables you to focus on specific subsets of data based on criteria you choose, helping you analyze and understand the information more effectively.

## 2.Basic Pivot Table

Cust ID	Region Payme	ent Source	Amou	nt	Product	Time Of Day
10001 East	Paypal Web	\$20.19 Online	22:19			
10002 West	Credit Web	\$17.85 Online	13:27			
10003 North	Credit Web	\$23.98 Online	14:27			
10004 West	Paypal Email	\$23.51 Book	15:38			
10005 South	Credit Web	\$15.33 Book	15:21			
10006 West	Paypal Email	\$17.30 Online	13:11			
10007 East	Credit Web	\$177.72	Book	21:59		
10008 West	Credit Web	\$21.76 Book	04:04			
10009 West	Paypal Web	\$15.92 Online	19:35			
10010 South	Paypal Web	\$23.39 Online	13:26			
10011 South	Paypal Email	\$24.45 Book	14:17			
10012 East	Credit Web	\$20.39 Book	01:01			
10013 North	Paypal Web	\$19.54 Online	10:04			
10014 East	Credit Web	\$151.67	Book	09:09		
10015 West	Credit Web	\$21.01 Online	05:05			
10016 West	Paypal Web	\$22.91 Online	20:29			
10017 West	Credit Email	\$19.51 Book	15:03			
10018 West	Paypal Web	\$20.16 Book	18:54			
10019 West	Credit Web	\$17.53 Online	20:00			
10020 West	Credit Web	\$17.74 Online	12:37			
10021 North	Paypal Email	\$17.16 Book	05:05			
10022 West	Credit Web	\$205.58	Book	20:42		
10023 South	Credit Email	\$18.12 Book	10:12			



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10024 West
Credit Web
$20.04 Online
16:27

10025 West
Paypal Email
$23.21 Online
20:22

10026 West
Credit Email
$22.79 Online
19:58

10027 West
Credit Web
$16.91 Online
19:44

10028 South
Credit Web
$20.22 Book
19:28

10029 East
Paypal Web
$18.36 Online
15:48

10030 West
Paypal Email
$206.80
Book
18:14

10031 North
Paypal Email
$17.95 Online
15:15

10032 East
Credit Web
$18.29 Book
12:59

10033 South
Paypal Web
$18.82 Book
02:02

10034 West
Credit Web
$16.35 Book
14:05

10035 West
Credit Web
$16.30 Online
04:04

10037 South
Paypal Web
$217 Book
00:00
```

Using the excel spreadsheet found above, create a series of Pivot Tables (or Pivot Charts) to answer the following questions.

What are the averages for purchases in each region?

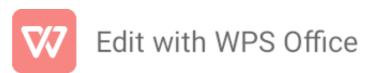
What form of payment is most common?

Do our customers shop at work (most likely between 8:00 and 17:00) or at home?

Turn in a printout of the pivot tables you used to answer each question.

Note: To answer number 3, I created a new column in the spreadsheet labeled "Hour of Day" and set it to just the hour instead of hour and minutes. In other words =hour(G8). The students who are excel power users should use an "if" formula to create a value of either day (time between 8:00 and 17:00) or night (not between 8:00 and 17:00).

- \* I can guide you on how to create Pivot Tables to answer each guestion:
- 1. \*\*Averages for Purchases in Each Region:\*\*
  - Select the data range.
  - Go to the "Insert" tab and choose "PivotTable."
- Drag "Region" to the Rows area and "Amount" to the Values area, selecting "Average" as the summary function.



## 2. \*\*Most Common Form of Payment:\*\*

- Create a new Pivot Table.
- Place "Payment" in the Rows area and "Amount" in the Values area, choosing "Count" as the summary function.
  - This will show the count of each payment type.

## 3. \*\*Customer Shopping Time Analysis:\*\*

- If you've added the "Hour of Day" column, create another Pivot Table.
- Place "Time Of Day" in the Rows area and "Amount" in the Values area, using "Sum" as the summary function.
  - You can use the "Hour of Day" column to filter for day (8:00 17:00) or night.
    - \* Remember to format your results neatly for each Pivot Table and provide the necessary details in your printout.

