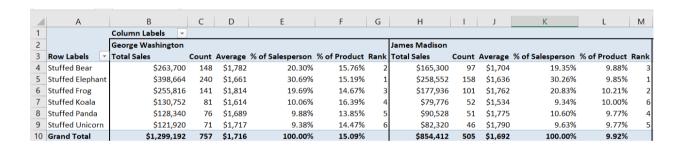
#### Pivot Table: CSA Tutorial Data File with Data Inconsistencies

### Use Pivot Tables to transform the Source Data from last year:

4	Α	В	С	D	Е	F	G	Н	1	J	К
1	Sales Order #	Salesperson #	Salesperson	Title	Region #	Region	State	Product	# of units	Sales	Profit Margin
2	35005	1305	John Tyler	Sales Associate I	4	West	NM	Stuffed Elephant	120	2,520.00	1,470.00
3	35006	1304	James Monroe	Sales Associate I	2	Northeast	NJ	Stuffed Frog	72	1,584.00	972.00
4	35009	1305	John Tyler	Sales Associate I	2	Northeast	NH	Stuffed Elephant	132	2,772.00	1,617.00
5	35011	1306	George Washington	Senior Sales Associate	3	South	LA	Stuffed Frog	108	2,376.00	1,458.00
6	35014	1303	James Polk	Senior Sales Associate	1	Midwest	SD	Stuffed Elephant	72	1,512.00	882.00
7	35017	1304	James Monroe	Sales Associate I	1	Midwest	MO	Stuffed Elephant	36	756.00	441.00
8	35025	1305	John Tyler	Sales Associate I	4	West	HI	Stuffed Unicorn	72	1,440.00	828.00
9	35026	1303	James Polk	Senior Sales Associate	2	Northeast	MA	Stuffed Bear	120	3,000.00	1,770.00
10	35027	1303	James Polk	Senior Sales Associate	2	Northeast	ME	Stuffed Frog	84	1,848.00	1,134.00
11	35032	1305	John Tyler	Sales Associate I	1	Midwest	MN	Stuffed Elephant	120	2,520.00	1,470.00
12	35041	1306	George Washington	Senior Sales Associate	4	West	UT	Stuffed Frog	120	2,640.00	1,620.00
13	35046	1305	John Tyler	Sales Associate I	3	South	AL	Stuffed Unicorn	120	2,400.00	1,380.00
14	35052	1306	George Washington	Senior Sales Associate	1	Midwest	MO	Stuffed Bear	72	1.800.00	1.062.00

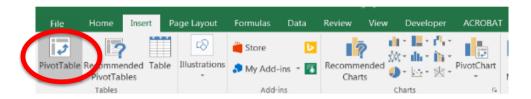
## Into meaningful information by using a Pivot Table:



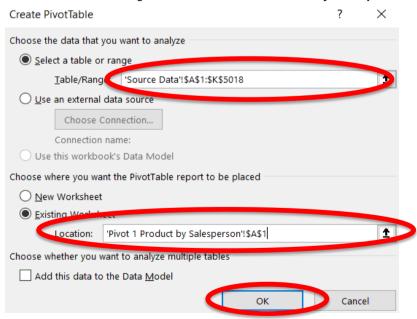
**A.** What were George Washington's sales in dollars for the Stuffed Bear product? Select any cell with data on the **Source Data Sheet**, for example cell C7.



B. On the Insert tab select Pivot Table

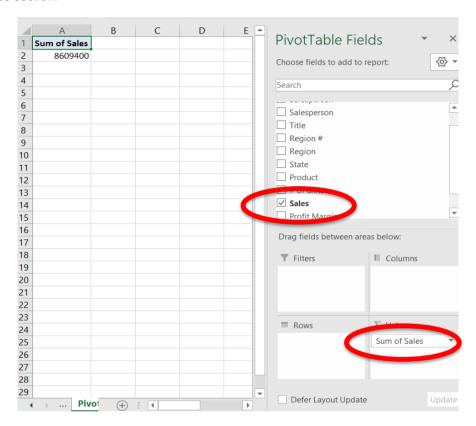


C. The Table/Range is defined based on the number of rows and columns in the data
Place the Pivot Table on an Existing Worksheet: 'Pivot 1 Product by Salesperson'!\$A\$1

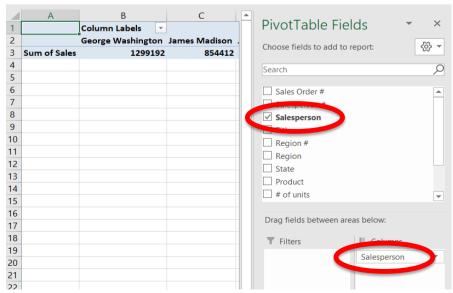


D. Select OK

**E.** Add **Sales** to the **Values** section, by selecting the field and dragging it to the Values section.

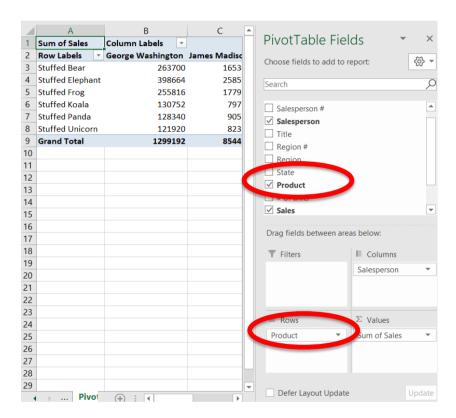


**F.** Add **Salesperson** to the Columns section by selecting the field and dragging it to the Columns section.



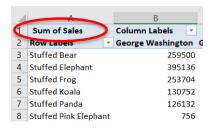


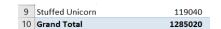
**G.** Add **Products** to the Rows section by selecting the field and dragging it to the Rows section.



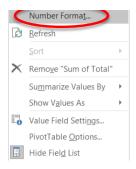
## **H.** Change the format of the numbers

(1) Right click on cell A1, which contains the heading Sum of Sales

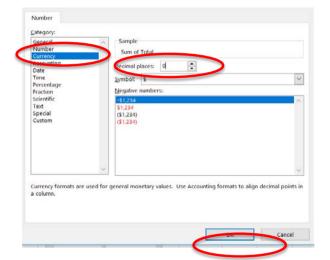




(2) Select Number Format



- (3) Currency
- (4) Decimal places 0



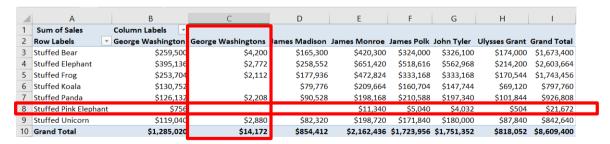
(5) OK

(6) If there are no data errors skip to step R on page 12.

If there are data entry errors they must be fixed.

Product Stuffed Elephant should be Stuffed Elephant.

Salesperson George Washington should be George Washington.



- I. Fix the data inconsistencies
  - (1) Click on the tab "Source Data", and then press the Ctrl key. Move slightly to the right, release the

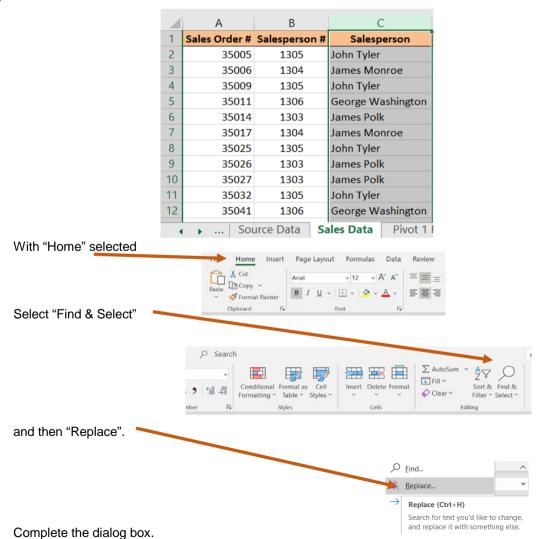
mouse and then release the Ctrl key.

27		35123	1303	James Polk	Senio							
28		35124	1305	John Tyler	Sales							
29		35132	1302	Ulysses Grant	Senio							
4	Source Data Pivot 1 Product by Sale:											
29	35132		1302	Ulysses Grant								
4	<b>←</b> →	Sou	urce Data	Source Data (2)								

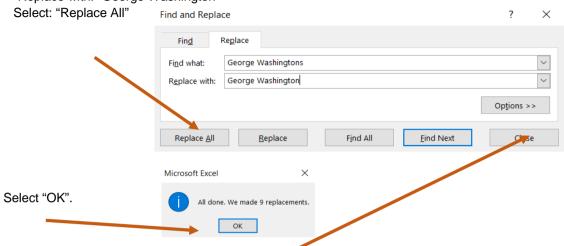
(2) Rename the Source Data (2) tab Sales Data



(3) Left click on Column C of the Sales Data sheet

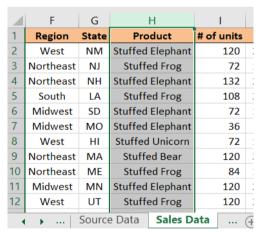


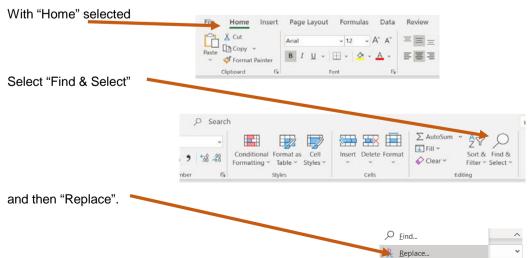
"Find what:" George Washingtons "Replace with:" George Washington

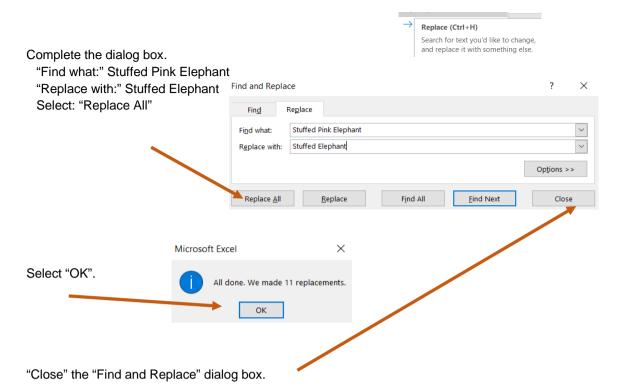


"Close" the "Find and Replace" dialog box.

### (4) Left click on Column H of the Sales Data sheet

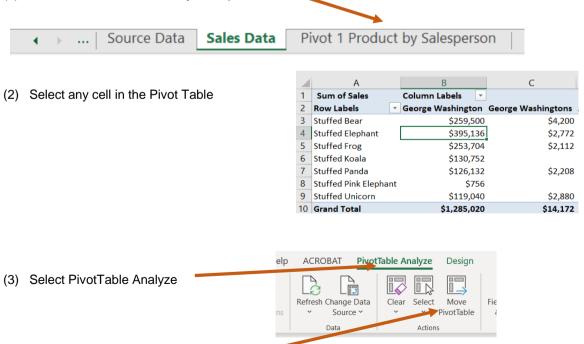




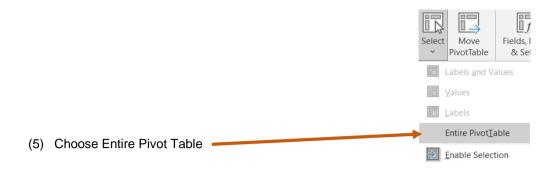


# J. Delete the old Pivot Table

(1) Select the Pivot 1 Product by Salesperson sheet



(4) Choose Select



- (6) Press the Delete key
- K. Select any cell with data on the Sales Data Sheet, for example cell C7.

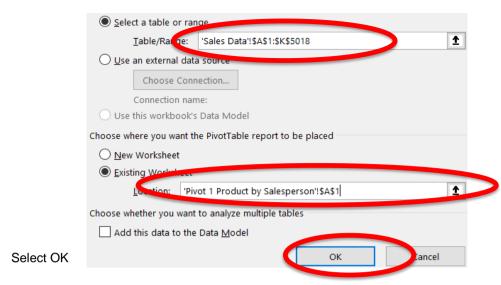


L. On the Insert tab select Pivot Table

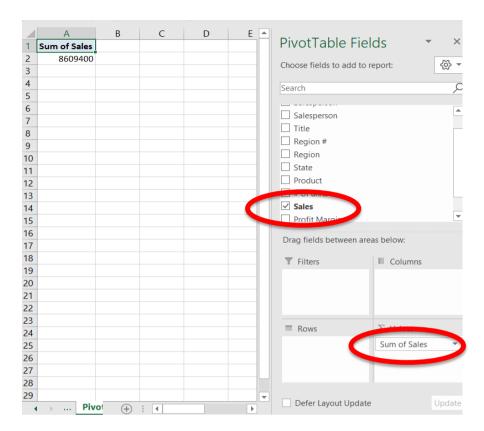


M. The Table/Range is defined based on the number of rows and columns in the data
Place the Pivot Table on an Existing Worksheet: 'Pivot 1 Product by Salesperson'!\$A\$1

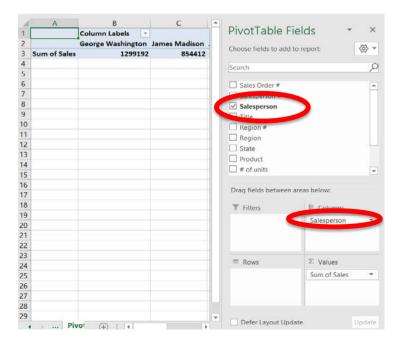




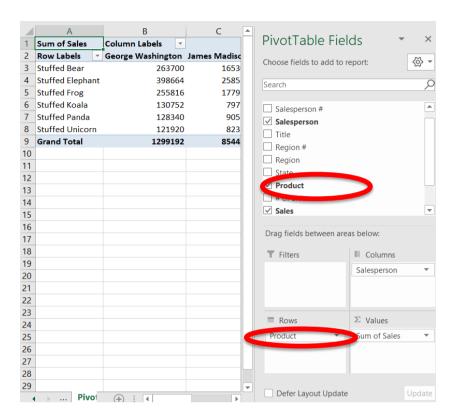
**N.** Add **Sales** to the **Values** section, by selecting the field and dragging it to the Values section.



**O.** Add **Salesperson** to the Columns section by selecting the field and dragging it to the Columns section.



**P.** Add **Products** to the Rows section by selecting the field and dragging it to the Rows section.



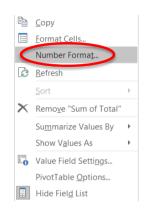
×

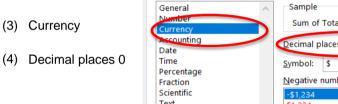
## Q. Change the format of the numbers

(1) Right click on cell A1, which contains the heading Sum of Sales.



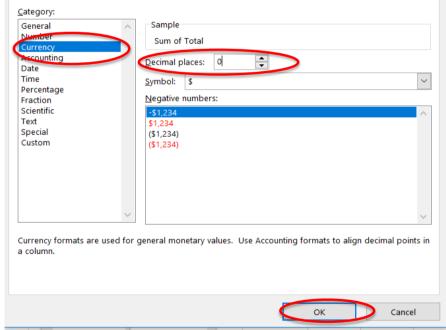
(2) Select Number Format





Format Cells Number

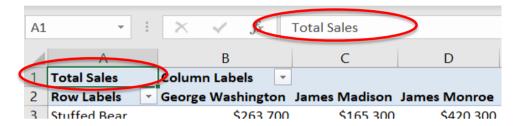
(5) OK



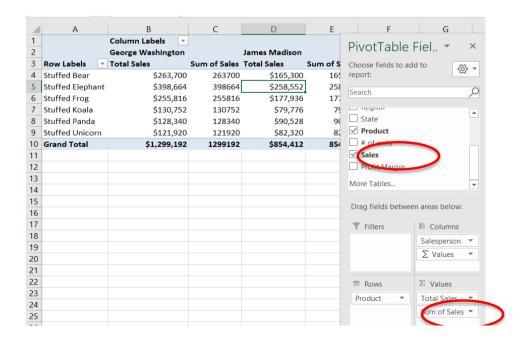
- R. Change the "Sum of Sales" to "Total Sales"
  - (1) Left click on cell A1, which contains the heading Sum of Sales



(2) Type in the new heading, "Total Sales"

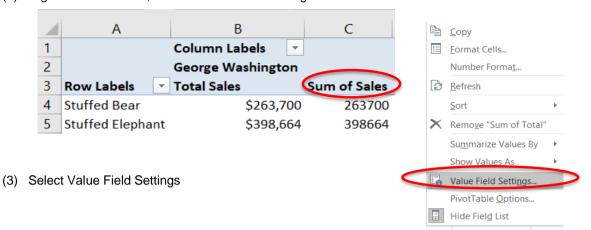


- S. How many orders of Stuffed Bears did George Washington's clients place?
  - (1) For the second time, add **Sales** to the **Values** section, by selecting the field and dragging it to the Values section.

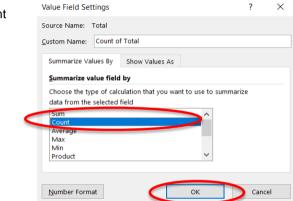


26				
27				
28			Defer Layout Update	Update

(2) Right click on cell C3, which contains the heading Sum of Sales

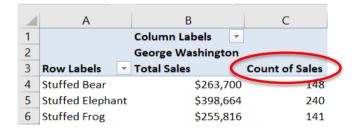


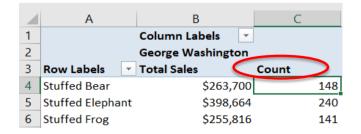
(4) Select Count



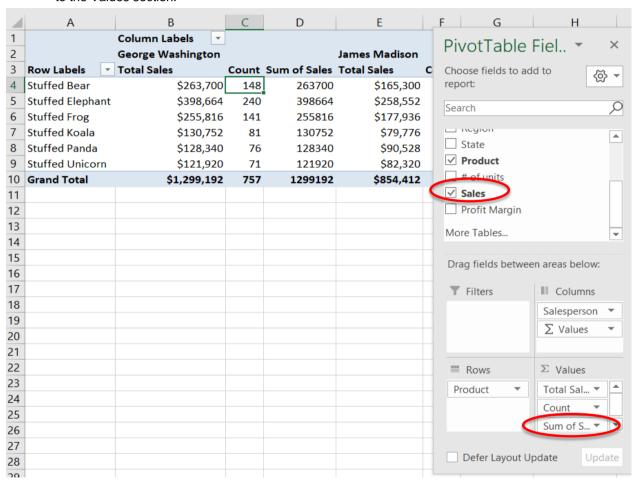
(5) Select OK

(6) Change C3 from Count of Total to Count

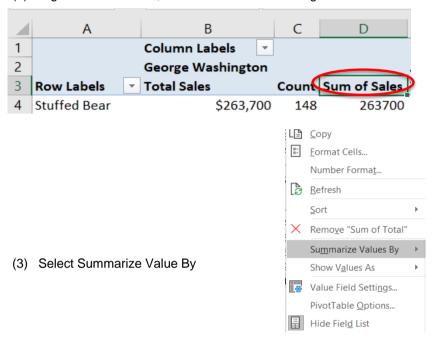


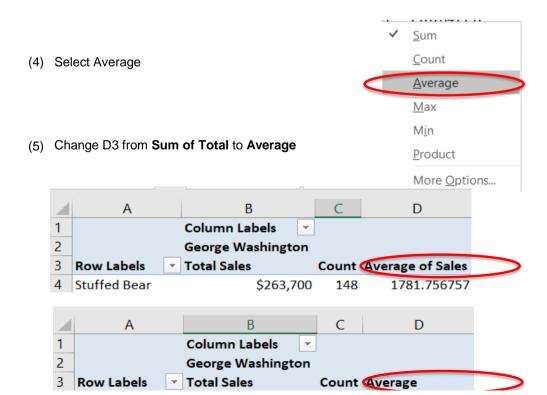


- T. George Washington's clients placed 757 orders, of which 148 were for Stuffed Bear product.
  What was the average sales in dollars for George Washington's clients that purchased the Stuffed Frog product?
  - (1) Again, add Sales to the **Values** section, by selecting the field and dragging it to the Values section.



(2) Right click on cell D3, which contains the heading Sum of Sales

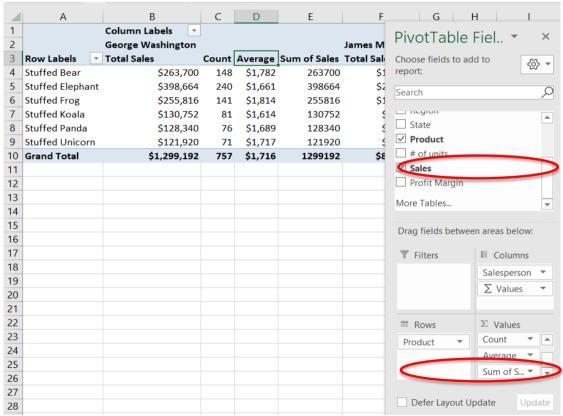




4	Stuffed Bear	\$263,700	148	1781.756757
5	Stuffed Elephant	\$398,664	240	1661.1

(6) Change the format to Currency

- U. George Washington sold his clients \$398,664 of the Stuffed Elephant product. The sales of Stuffed Elephants represent what percent of his total sales?
  - (1) Again, add Sales to the Values section, by selecting the field and dragging it to the Values section.



1

2

3 Row Labels

**Column Labels** 

▼ Total Sales

**George Washington** 

1

2

3

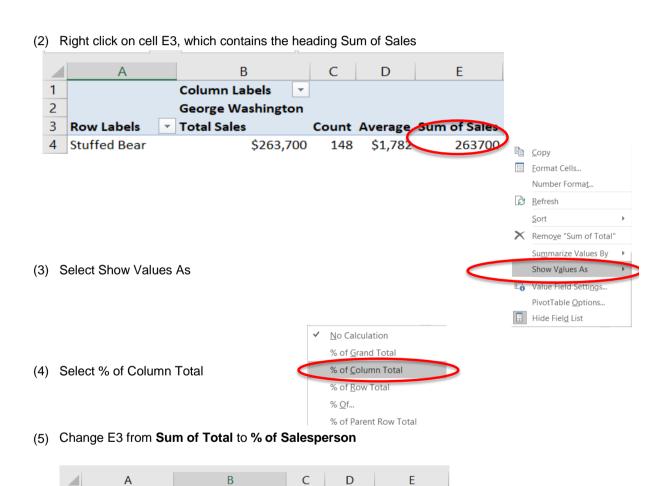
4

**Row Labels** 

Stuffed Bear

Stuffed Frog

Stuffed Elephant



Count Average Sum of Sales

Column Labels

**Total Sales** 

В

George Washington

\$263,700

\$398,664

\$255,816

C

148

240

141

D

\$1,782

\$1,661

\$1,814

Count Average % of Salesperson

E

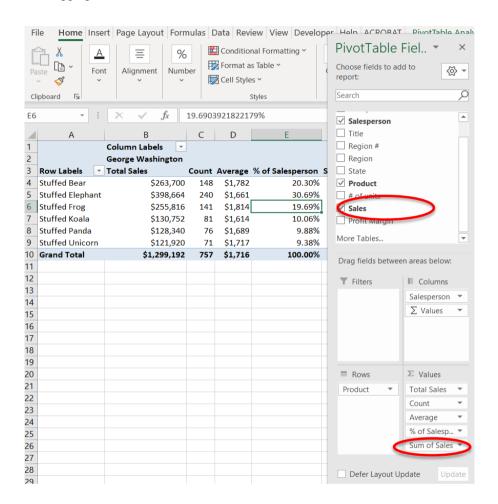
20.30%

30.69%

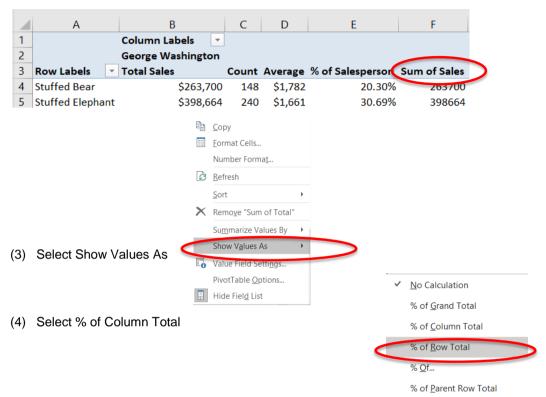
19.69%

10	Grand Total	\$1,299,192	757	\$1,716	100.00%
9	Stuffed Unicorn	\$121,920	71	\$1,717	9.38%
8	Stuffed Panda	\$128,340	76	\$1,689	9.88%
/	Stuffed Koala	\$130,752	81	\$1,614	10.06%

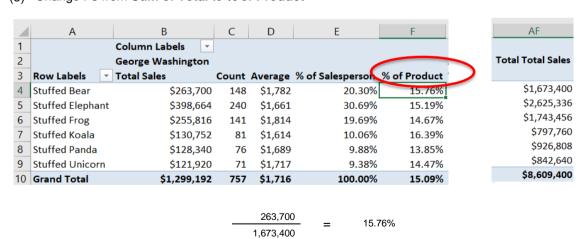
- V. The sales of Stuffed Elephants represent 30.69% of George Washington's total sales. The sales of Stuffed Bear by George Washington represent what percent of the total sales of the Stuffed Bear product.
  - (1) Again, add Sales to the Values section, by selecting the field and dragging it to the Values section.



(2) Right click on cell F3, which contains the heading Sum of Sales.



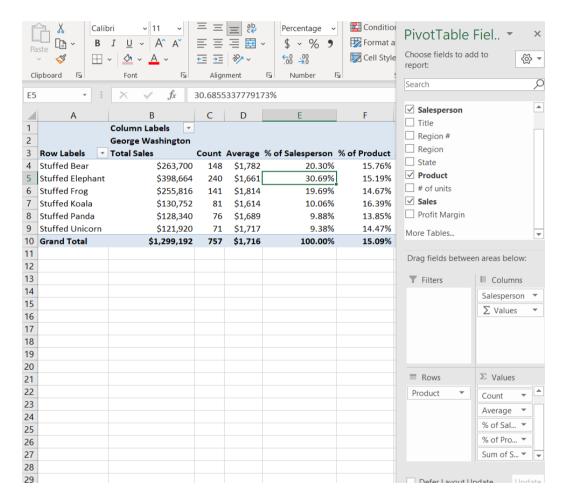
## (5) Change F3 from Sum of Total to % of Product



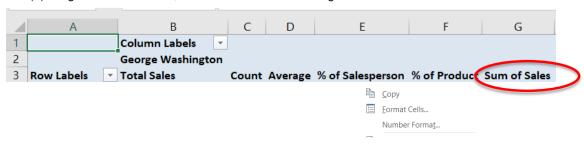
W. The sales of Stuffed Bear by George Washington represent 15.76% of the total sales of the Stuffed Bear product.

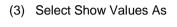
What were the sales in dollars of the product with the second highest sales for salesperson George Washington?

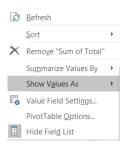
(1) Again, add Sales to the Values section, by selecting the field and dragging it to the Values section.



(2) Right click on cell G3, which contains the heading Sum of Sales.







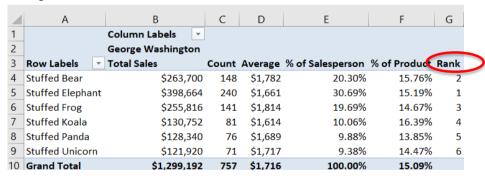
% of Grand Total % of Column Total % of Row Total % <u>O</u>f... % of Parent Row Total % of Parent Column Total % of Parent Total... Difference From... % Difference From... Running Total In... % Running Total In... Rank Smallest to Largest... Rank <u>L</u>argest to Smallest... Index Show Values As (Rank) X

✓ No Calculation

- (4) Select Rank Largest to Smallest
- (5) Select OK to make the base field Product



(6) Change G3 from Sum of Total to Rank

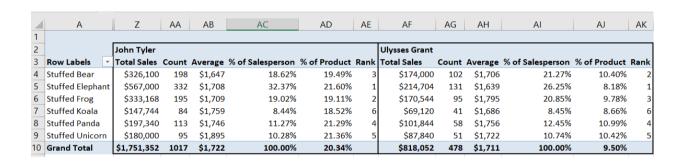


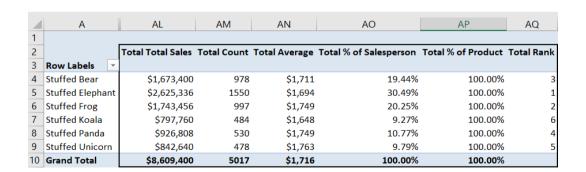
The Stuffed Bear product, with sales of \$263,700, had the second highest sales for salesperson George Washington.

## Y. Draw a thick outside border around B2:G10, copy the format to AQ.

4	А	В	С	D	E	F	G	Н	1	J	K	L	М
1	Column Labels 🔻												
2		George Washington					James Madison						
3	Row Labels 🔻	Total Sales	Count	Average	% of Salesperson	% of Product	Rank	Total Sales	Count	Average	% of Salesperson	% of Product	Rank
4	Stuffed Bear	\$263,700	148	\$1,782	20.30%	15.76%	2	\$165,300	97	\$1,704	19.35%	9.88%	3
5	Stuffed Elephant	\$398,664	240	\$1,661	30.69%	15.19%	1	\$258,552	158	\$1,636	30.26%	9.85%	1
6	Stuffed Frog	\$255,816	141	\$1,814	19.69%	14.67%	3	\$177,936	101	\$1,762	20.83%	10.21%	2
7	Stuffed Koala	\$130,752	81	\$1,614	10.06%	16.39%	4	\$79,776	52	\$1,534	9.34%	10.00%	6
8	Stuffed Panda	\$128,340	76	\$1,689	9.88%	13.85%	5	\$90,528	51	\$1,775	10.60%	9.77%	4
9	Stuffed Unicorn	\$121,920	71	\$1,717	9.38%	14.47%	6	\$82,320	46	\$1,790	9.63%	9.77%	5
10	Grand Total	\$1,299,192	757	\$1,716	100.00%	15.09%		\$854,412	505	\$1,692	100.00%	9.92%	

1	Α	N	0	Р	Q	R	S	Т	U	V	W	X	Υ
1	ı												
2		James Monroe			0/ 10 1	0/ (5 )		James Polk			0/ 10 1	0/ 55 1 .	
3	Row Labels 🔻	Total Sales	Count	Average	% of Salesperson	% of Product	Rank	Total Sales	Count	Average	% of Salesperson	% of Product	Rank
4	Stuffed Bear	\$420,300	248	\$1,695	19.44%	25.12%	3	\$324,000	185	\$1,751	18.79%	19.36%	3
5	Stuffed Elephant	\$662,760	382	\$1,735	30.65%	25.24%	1	\$523,656	307	\$1,706	30.38%	19.95%	1
6	Stuffed Frog	\$472,824	273	\$1,732	21.87%	27.12%	2	\$333,168	192	\$1,735	19.33%	19.11%	2
7	Stuffed Koala	\$209,664	125	\$1,677	9.70%	26.28%	4	\$160,704	101	\$1,591	9.32%	20.14%	6
8	Stuffed Panda	\$198,168	116	\$1,708	9.16%	21.38%	6	\$210,588	116	\$1,815	12.22%	22.72%	4
9	Stuffed Unicorn	\$198,720	113	\$1,759	9.19%	23.58%	5	\$171,840	102	\$1,685	9.97%	20.39%	5
10	Grand Total	\$2,162,436	1257	\$1,720	100.00%	25.12%		\$1,723,956	1003	\$1,719	100.00%	20.02%	





Pivot Table: CSA Tutorial Data File with Data Inconsistencies