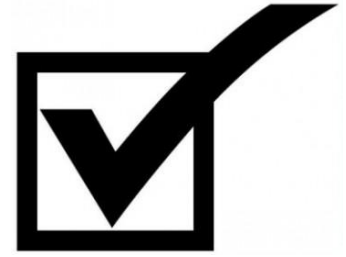


**BUSINESS  
PROFESSIONALS  
of AMERICA**  
Giving Purpose to Potential



# **ADVANCED SPREADSHEET APPLICATIONS**

**(235)**

## **REGIONAL 2026**

### **PRODUCTION**

Job 1: Spreadsheet Creation \_\_\_\_\_ (100 points)

Job 2: Formulas and Charting \_\_\_\_\_ (100 points)

Job 3: Formulas \_\_\_\_\_ (100 points)

**TOTAL POINTS** \_\_\_\_\_ **(300 points)**

**Test Time: 90 minutes**

### **GENERAL GUIDELINES:**

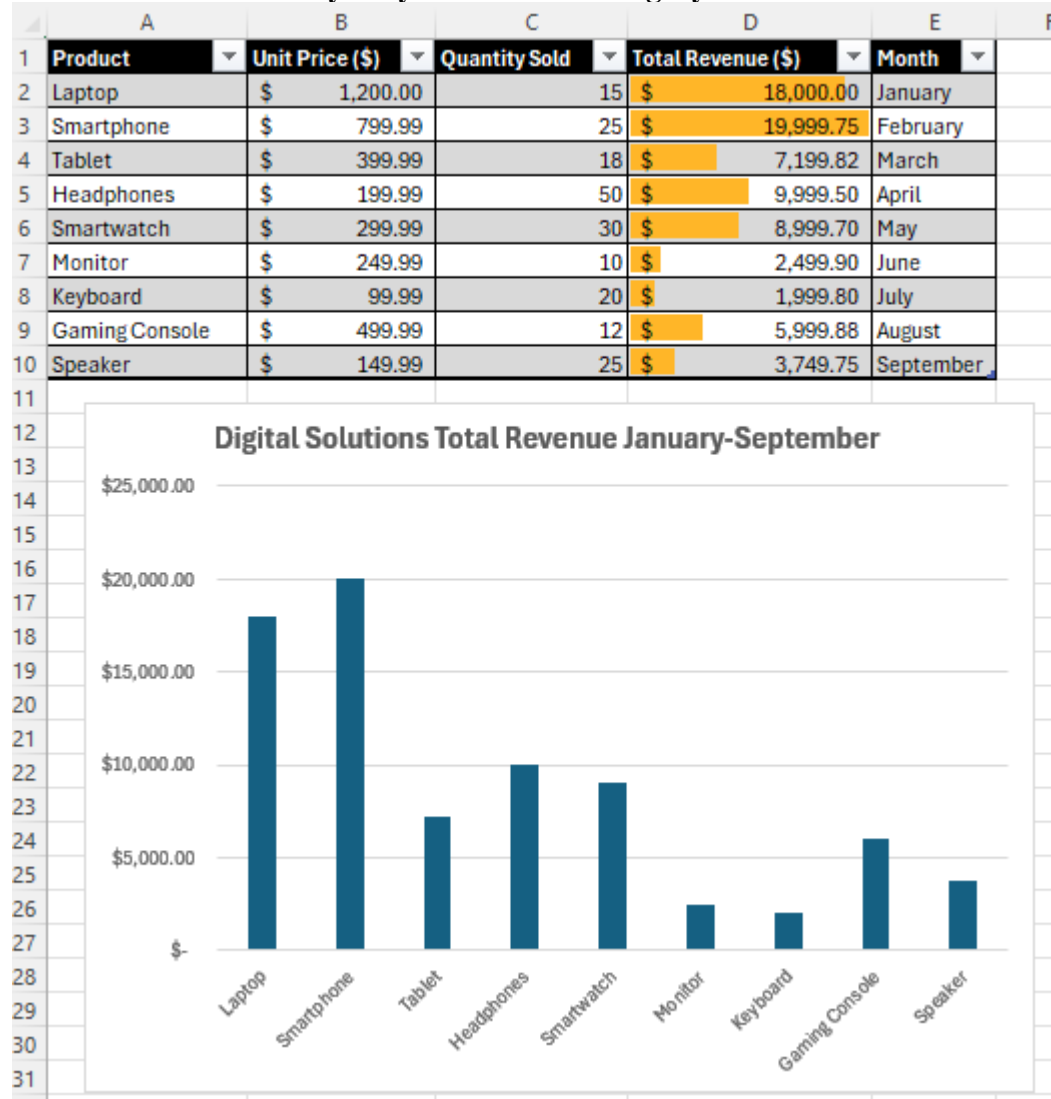
*Failure to adhere to any of the following rules will result in disqualification:*

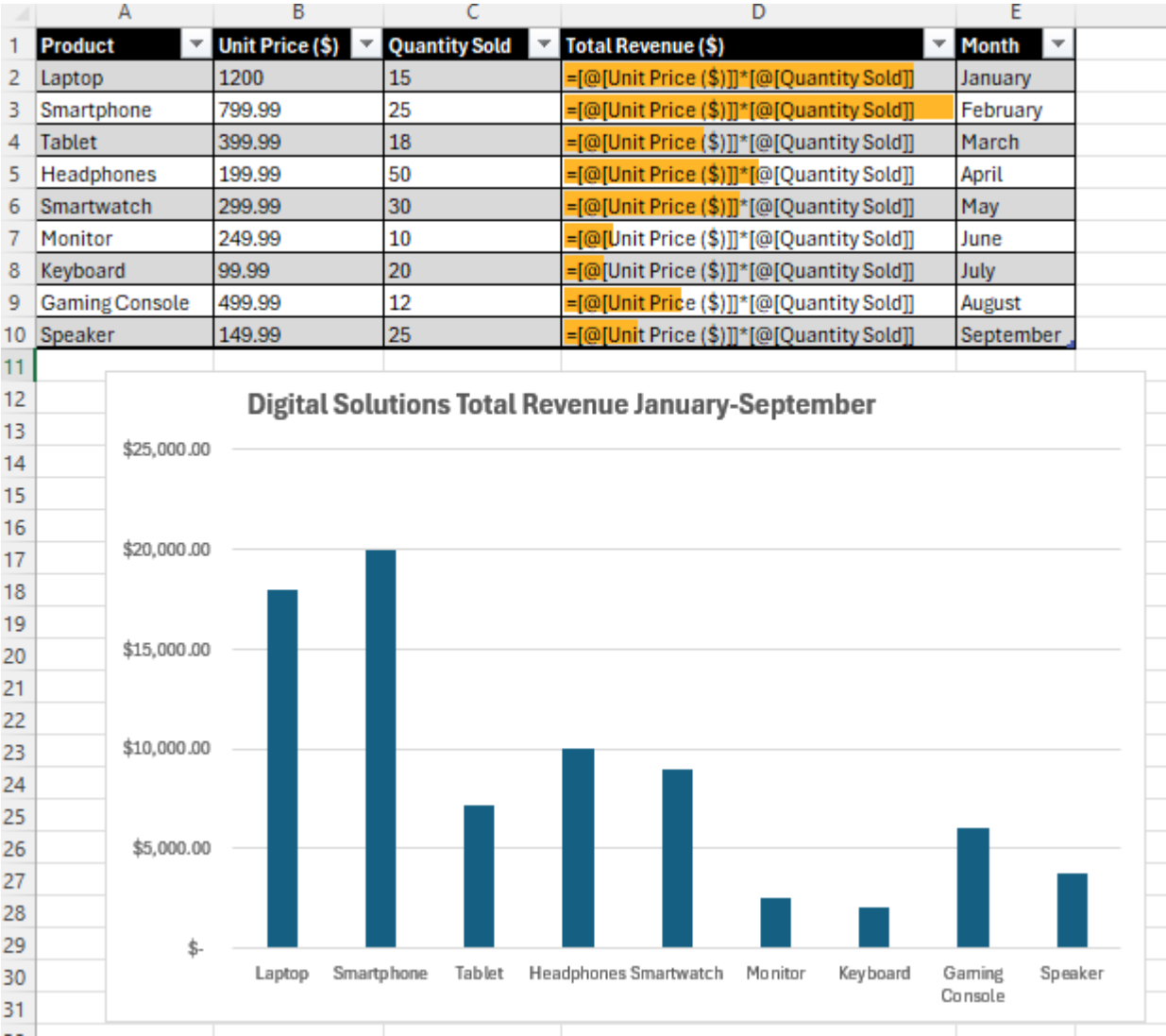
1. Contestants must hand in this test booklet and all printouts if any.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.

### **EXAM GUIDELINES:**

1. Ensure this test booklet contains Jobs 1-3.
2. Key all jobs according to the instructions given.
3. Correct any and all formatting, spelling or grammar errors. Use the formatting guide in the *Style & Reference Manual*.
4. Your name or initials should *not* appear on any work you submit. Use your Contestant ID in any occasion you would normally key your reference initials.
5. In the lower right-hand corner of ALL work submitted (unless otherwise specified), key your Contestant ID and job number.
6. If you complete the event before the end of the time allotted, notify the proctor. Time may be considered a factor in determining a winner when there is a tie score.
7. Place your scoring sheet on top of your jobs. Jobs should be placed in numerical order.

JOB	CRITERIA	POINTS POSSIBLE	POINTS AWARDED
<b>Job 1: Spreadsheet Creation (100 points)</b>	Spreadsheet creation: -5 for each data entry error	25	
	Table is formatted correctly	5	
	<b>Total Revenue</b> formula is correct	10	
	Solid color data bar in <b>Total Revenue</b> column	10	
	Column Chart is created correctly	10	
	Chart Title is correct	10	
	Chart is in correct location	10	
	Printouts show spreadsheet and chart as well as formulas	10	
	Contestant ID and Job 1 appear correctly	10	
<b>TOTAL Job 1</b>		<b>100</b>	
<b>Job 2: Formulas and Charting (100 points)</b>	<b>Today's Date</b> function is correct	5	
	All currency formatted correctly	5	
	<b>Formula for Units Remaining in Inventory</b> is correct	10	
	<b>Total Value of Inventory</b> formula correct	10	
	Spreadsheet formatted as table correctly	5	
	<b>Total Value of Inventory</b> column created correctly	10	
	<b>Percent of Total Inventory</b> formula is correct	10	
	<b>Percent of Total Inventory</b> formatted correctly	5	
	Table sorted correctly	5	
	Spreadsheet is printed correctly	5	
	3D pie chart is created correctly	10	
	3D pie chart title formatted correctly	5	
	No legend on 3D pie chart	5	
	Data labels show as instructed	5	
	Pie chart is printed with Contestant ID and Job 2	5	
<b>TOTAL Job 2</b>		<b>100</b>	
<b>Job 3 Formulas (100 points)</b>	Spreadsheet creation: -5 for each data entry error	40	
	<b>Mileage Reimbursement</b> column and formula created correctly	15	
	<b>Total Reimbursements</b> is correct	15	
	Spreadsheet is formatted as per instructions	20	
	Printouts show spreadsheet with results and showing formulas	5	
	Contestant ID and Job 3 appear correctly	5	
<b>TOTAL Job 3</b>		<b>100</b>	
<b>GRAND TOTAL</b>		<b>300</b>	

**Job 1: Spreadsheet Creation****GRADERS:** Colors may vary or be a shade of gray.



**Job 2: Formulas and Charting**

**GRADERS:** Today's Date function: (=NOW()) can also be used as long as the date returned is formatted as instructed. Percent of Total Inventory formula should use absolute cell reference OR using the table field name in the formula as shown. Column headings should be formatted so the words don't split within cells. Example of spreadsheet key:

Sunday,  
March 23,  
2025

## Digital Solutions Inventory as of

Product ID	Product Name	Opening Stock	Number of Units Sold	Units Remaining in Inventory	Cost Per Unit (USD)	Total Value of Inventory	Percentage of Total Inventory
P101	Laptop	50	10	40	\$1,200	\$48,000	20.28%
P105	Smartphone	70	20	50	\$ 900	\$45,000	19.02%
P106	Tablet	45	8	37	\$ 700	\$25,900	10.95%
P122	Graphics Card	40	9	31	\$ 600	\$18,600	7.86%
P102	Monitor	40	5	35	\$ 500	\$17,500	7.40%
P121	Gaming Monitor	25	4	21	\$ 400	\$ 8,400	3.55%
P123	CPU	30	7	23	\$ 350	\$ 8,050	3.40%
P107	Router	55	12	43	\$ 150	\$ 6,450	2.73%
P126	SSD	45	8	37	\$ 120	\$ 4,440	1.88%
P108	External Hard Drive	25	5	20	\$ 200	\$ 4,000	1.69%
P124	Motherboard	25	5	20	\$ 200	\$ 4,000	1.69%
P146	Gaming Desk	25	3	22	\$ 150	\$ 3,300	1.39%
P125	RAM	50	11	39	\$ 80	\$ 3,120	1.32%
P128	Power Supply	35	6	29	\$ 100	\$ 2,900	1.23%
P127	HDD	60	12	48	\$ 60	\$ 2,880	1.22%
P104	Headphones	30	3	27	\$ 100	\$ 2,700	1.14%
P120	Gaming Chair	15	2	13	\$ 200	\$ 2,600	1.10%
P111	Desk Chair	20	3	17	\$ 150	\$ 2,550	1.08%
P129	PC Case	40	9	31	\$ 80	\$ 2,480	1.05%
P103	Keyboard	60	15	45	\$ 50	\$ 2,250	0.95%
P109	Wireless Earbuds	35	7	28	\$ 80	\$ 2,240	0.95%
P117	Gaming Keyboard	25	4	21	\$ 100	\$ 2,100	0.89%
P119	Gaming Headset	20	3	17	\$ 120	\$ 2,040	0.86%
P118	Gaming Mouse	30	6	24	\$ 80	\$ 1,920	0.81%
P110	Webcam	40	10	30	\$ 60	\$ 1,800	0.76%
P130	CPU Cooler	30	4	26	\$ 50	\$ 1,300	0.55%
P116	Wireless Mouse	35	5	30	\$ 40	\$ 1,200	0.51%
P144	Wireless Charger	40	7	33	\$ 30	\$990	0.42%
P115	Power Strip	40	8	32	\$ 25	\$800	0.34%
P113	USB Flash Drive	50	12	38	\$ 20	\$760	0.32%
P112	Desk Lamp	30	7	23	\$ 30	\$690	0.29%
P131	Monitor Stand	25	3	22	\$ 30	\$660	0.28%
P136	External DVD Drive	15	2	13	\$ 50	\$650	0.27%
P143	Laptop Sleeve	30	5	25	\$ 20	\$500	0.21%
P139	Laptop Cooling Pad	30	6	24	\$ 20	\$480	0.20%
P140	USB Hub	35	4	31	\$ 15	\$465	0.20%
P114	Ethernet Cable	60	15	45	\$ 10	\$450	0.19%

P132	Mouse Pad	50	8	42	\$ 10	\$420	0.18%
P134	Cable Management Kit	30	4	26	\$ 15	\$390	0.16%
P135	WiFi Adapter	20	3	17	\$ 20	\$340	0.14%
P145	USB-C Cable	50	9	41	\$8	\$328	0.14%
P138	Keyboard Cleaner	40	9	31	\$8	\$248	0.10%
P142	USB-C Adapter	20	4	16	\$ 15	\$240	0.10%
P141	Anti-Glare Screen Protector	25	3	22	\$ 10	\$220	0.09%
P133	Thermal Paste	40	5	35	\$5	\$175	0.07%
P137	Printer Cable	25	4	21	\$5	\$105	0.04%
<b>Total</b>						<b>\$236,631</b>	

## Columns to check for formulas

=TODAY()

Units Remaining in Inventory	Cost Per Unit (USD)	Total Value of Inventory	Percentage of Total Inventory
=C3-D3	1200	=E3*F3	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C4-D4	900	=E4*F4	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C5-D5	700	=E5*F5	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C6-D6	600	=E6*F6	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C7-D7	500	=E7*F7	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C8-D8	400	=E8*F8	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C9-D9	350	=E9*F9	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C10-D10	150	=E10*F10	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C11-D11	120	=E11*F11	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C12-D12	200	=E12*F12	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C13-D13	200	=E13*F13	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C14-D14	150	=E14*F14	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C15-D15	80	=E15*F15	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C16-D16	100	=E16*F16	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C17-D17	60	=E17*F17	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C18-D18	100	=E18*F18	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C19-D19	200	=E19*F19	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C20-D20	150	=E20*F20	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C21-D21	80	=E21*F21	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C22-D22	50	=E22*F22	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C23-D23	80	=E23*F23	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C24-D24	100	=E24*F24	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C25-D25	120	=E25*F25	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C26-D26	80	=E26*F26	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]
=C27-D27	60	=E27*F27	=[@[Total Value of Inventory]]/Table3[[#Totals],[Total Value of Inventory]]

# ADVANCED SPREADSHEET APPLICATIONS

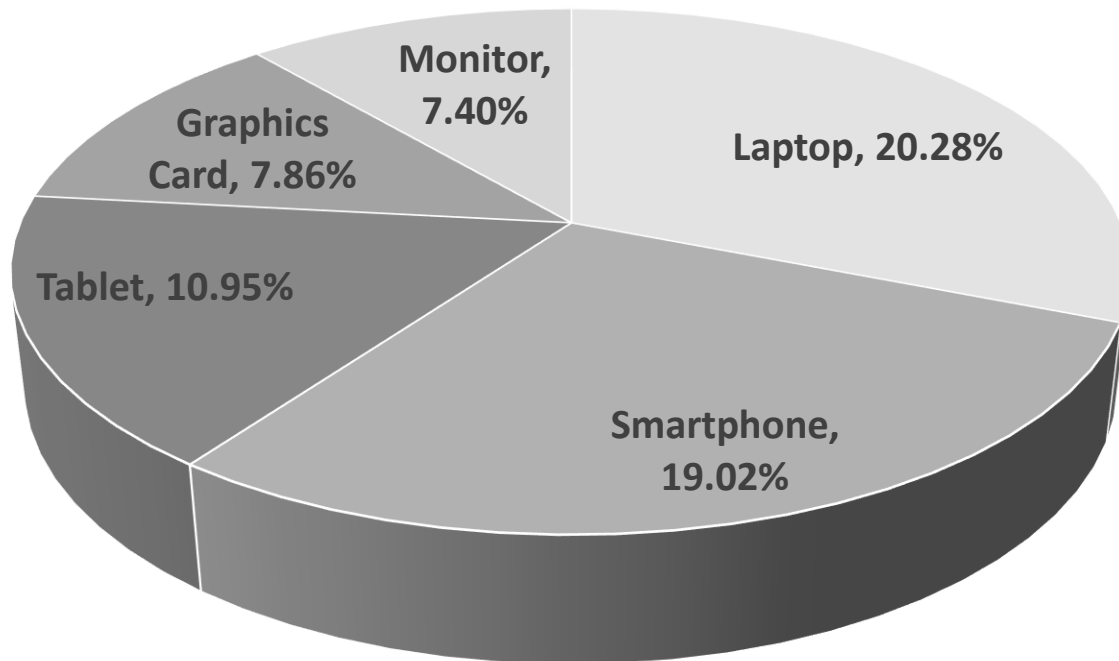
## REGIONAL KEY 2026

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=C28-D28	50	=E28*F28	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C29-D29	40	=E29*F29	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C30-D30	30	=E30*F30	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C31-D31	25	=E31*F31	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C32-D32	20	=E32*F32	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C33-D33	30	=E33*F33	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C34-D34	30	=E34*F34	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C35-D35	50	=E35*F35	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C36-D36	20	=E36*F36	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C37-D37	20	=E37*F37	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C38-D38	15	=E38*F38	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C39-D39	10	=E39*F39	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C40-D40	10	=E40*F40	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C41-D41	15	=E41*F41	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C42-D42	20	=E42*F42	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C43-D43	8	=E43*F43	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C44-D44	8	=E44*F44	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C45-D45	15	=E45*F45	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C46-D46	10	=E46*F46	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C47-D47	5	=E47*F47	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
=C48-D48	5	=E48*F48	=[@[Total Value of Inventory]]/Table3[ [#Totals],[Total Value of Inventory]]
		<b>=SUBTOTAL(109,[Total Value of Inventory])</b>	



### Digital Solutions Percent of Total Inventory



**GRADERS:** Chart colors and fonts may vary.

**Job 3: Formulas**

**GRADERS: Formatting may vary. Students' choice of borders, shading, font, font size, etc. Absolute cell reference must be used for Mileage Reimbursement formula. SUM for total.**

Mileage Reimbursement Rate per Mile		\$0.52	
Full Name	Department	Mileage	Mileage Reimbursement
Daniel Martinez	Administrative Support	105	\$54.60
James Johnson	Administrative Support	120	\$62.40
Matt Johnson	Administrative Support	47	\$24.44
Danie Davis	Administrative Support	69	\$35.88
Michael Johnson	Financial Services	38	\$19.76
Richard Perez	Financial Services	46	\$23.92
Christopher Rodriguez	Financial Services	58	\$30.16
David Brown	Financial Services	93	\$48.36
John Smith	Human Resources	79	\$41.08
Bill Hernandez	Human Resources	86	\$44.72
Michael Garcia	Human Resources	45	\$23.40
Michael Smith	Human Resources	88	\$45.76
David Wilson	Information Technology	97	\$50.44
	<b>TOTAL</b>		<b>\$504.92</b>

Mileage Reimbursement Rate per Mile		0.52	
Full Name	Department	Mileage	Mileage Reimbursement
Daniel Martinez	Administrative Support	105	=C3*\$C\$1
James Johnson	Administrative Support	120	=C4*\$C\$1
Matt Johnson	Administrative Support	47	=C5*\$C\$1
Danie Davis	Administrative Support	69	=C6*\$C\$1
Michael Johnson	Financial Services	38	=C7*\$C\$1
Richard Perez	Financial Services	46	=C8*\$C\$1
Christopher Rodriguez	Financial Services	58	=C9*\$C\$1
David Brown	Financial Services	93	=C10*\$C\$1
John Smith	Human Resources	79	=C11*\$C\$1
Bill Hernandez	Human Resources	86	=C12*\$C\$1
Michael Garcia	Human Resources	45	=C13*\$C\$1
Michael Smith	Human Resources	88	=C14*\$C\$1
David Wilson	Information Technology	97	=C15*\$C\$1
	<b>TOTAL</b>		<b>=SUM(D3:D15)</b>