

2018 UIL Student Activity Conference

Detailed Solutions for

2018 State, Group 11



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2018 State Group 11

Step 1: Write Down What You Know While You Read Table.

Capital Stock:

5-1-15	Alex	600 sh	Par ?	\$6,000
5-1-15	Maia	400 sh	??	\$4,000
1-2-17	Nathan	??	??	??

Step 2: Calculate Par based on Alex: $\$6,000 / 600 \text{ sh} = \10

5-1-15	Alex	600 sh	\$10	\$6,000
5-1-15	Maia	400 sh	\$10	\$4,000
1-2-17	Nathan	??	\$10	??

Step 3: Use the “spreadsheet” approach to analyze the insurance premiums.

Pmt Date	Annual Amt	Monthly Amt	Expense in the Year...			
			2015	2016	2017	2018
5-2-15	\$2,220	185	1,480	740	---	---
5-2-16	\$2,460	205	---	1,640	820	---
5-2-17	\$2,580	215	---	---	1,720	860
			1,480	2,380	2,540	xx

Questions #54-56 are for Prepaid Insurance in the Trial Balance column:

Q#54 \$2,220 (Beg Bal Zero + Bot in 2015 \$2,220 = 2,220)

Q#55 \$3,200 (Beg Bal \$740 + Bot in 2016 \$2,460 = 3,200)

Q#56 \$3,400 (Beg Bal \$820 + Bot in 2017 \$2,580 = 3,400)

Questions #57-59 are for Insurance Expense in the Adjusted Trial Balance column:

Pmt Date	Annual Amt	Monthly Amt	Expense in the Year...			
			2015	2016	2017	2018
5-2-15	\$2,220	185	1,480	740	---	---
5-2-16	\$2,460	205	---	1,640	820	---
5-2-17	\$2,580	215	---	---	1,720	860
			1,480	2,380	2,540	xx
			Q#57	Q#58	Q#59	

Questions #60-62 are for Prepaid Insurance in the Adjusted Trial Balance column.

Q#60

Q#61

Q#62

Step 4: On the page “Table 3” in the chart at bottom of the page (Adjusted Trial Balances), write the amount of Prepaid Insurance as of 12-31-17 after adjustment, \$860. Also write the amount of Insurance Expense for 2017, \$2,540

Step 5: Continue reading the Table (paragraph 5) and recall that we are given the adjusted trial balance amount for Dividends Payable \$4,320.

Given: There were NO dividends declared in years 2015 or 2016. The balance in Dividends Payable must be from dividends declared in the year 2017. Therefore, \$4,320 is also the balance in the Dividends account. On the page “Table 3” in the chart at bottom of the page (Adjusted Trial Balances), write the amount of Dividends \$4,320.

We are told that dividends were declared to all shareholders of record as of December 1, 2017 so Nathan also received this dividend of \$3.60 per share.

Dividends \$4,320 / \$3.60 per share = 1,200 total shares

5-1-15	Alex	600 sh	\$10	\$6,000
5-1-15	Maia	400 sh	\$10	\$4,000
1-2-17	Nathan		\$10	
Totals		1,200		

Nathan’s shares: Total shares 1,200 – Alex 600 – Maia 400 = 200 shares **Q#63**
 Nathan’s shares 200 x par \$10 = \$2,000

5-1-15	Alex	600 sh	\$10	\$6,000
5-1-15	Maia	400 sh	\$10	\$4,000
1-2-17	Nathan	200	\$10	2,000
Totals		1,200		

Total Capital Stock: \$6,000 + 4,000 + 2,000 = \$12,000 **Q#73**

On the page “Table 3” in the chart at bottom of the page (Adjusted Trial Balances), write the amount for Capital Stock \$12,000

Step 6: Continue reading the Table (paragraph 6) and listen for the bells and whistles to sound for the major clue of “gross profit percentage based on NET sales of 45%.”

Get ready to use the most fun formula of all: the income statement formula for a merchandising business.

Oh wait...we are not given the amount of beginning Merchandise Inventory (from 1-1-17). So look for another major clue...we are given the amount of Income Summary found in the ADJUSTED Trial Balance. Let’s solve beginning inventory first.

If Income Summary ended up with a credit of \$1,830...how did it get there?
 Answer: from the adjusting entry for inventory.

Beg. Bal.	Shibutani Inc. Worksheet					
Jan. 1	For the Year Ended December 31, 2017					
Account Title	Trial Balance		Adjustments		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit	Debit	Credit
Merchandise Inventory			1,830		33,070	
Income Summary				1,830		1,830

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Calculate Merchandise Inventory on 1-1-17: MI on 12-31-17 \$33,070 MINUS AJE 1,830 = 31,240 **Q#65**

Step 7: Using the income statement formula for a merchandising business, write down what you know:

Sales			
SD		320	
SRA		1,560	
Net S			100%
BI		31,240	
Pur	112,608		
TI	4,885		
Del			
PD	3,746		
PRA	2,874		
Net P			
COMAS			
EI		33,070	
COMS			
GP			45%

Be careful...the Gross Profit % is based on NET Sales (not Gross Sales)

Net Sales 100%
Minus GP 45%
COMS 55%

Step 8: Calculate the following:

Cost of Delivered Merchandise: Pur 112,608 + TI 4,885 = Del 117,493 **Q#66**

Net Purchases: Del 117,493 – PD 3,746 – PRA 2,874 = Net P 110,873 **Q#67**

Cost of Mdse Available for Sale: BI 31,240 + Net P 110,873 = COMAS 142,113 **Q#70**

Cost of Mdse Sold: COMAS 142,113 – EI 33,070 = COMS 109,043 **Q#68**

(See blue arrows above)

Calculate Net Sales: COMS 109,073 / 55% = Net Sales 198,260 **Q#69**

Sales				
SD		320		
SRA		1,560		
Net S			198,260	100%
BI		31,240		
Pur	112,608			
TI	4,885			
Del	117,493			
PD	3,746			
PRA	2,874			
Net P		110,873		
COMAS		142,113		
EI		33,070		
COMS			109,043	???
GP				45%

Step 9: Calculate Gross Profit: Net Sales 198,260 – COMS 109,043 = GP 89,217 **Q#71**

Calculate Gross Sales: Net S 198,260 + SD 320 + SRA 1,560 = Gross Sales 200,140


Gross Sales (NOT NET SALES) is the actual Sales account in the General Ledger.

On the page “Table 3” in the chart at bottom of the page (Adjusted Trial Balances), write the amount for Sales \$200,140 **Q#64**

Step 10:

GP	89,217
Expenses	66,172
Net Income	

Given Various Expenses 63,632
 plus Insurance Expense 2,540
 Equals Total Expenses 66,172



Calculate Net Income: GP 89,217 – Total Exp 66,172 = Net Income \$23,045 **Q#72**

Step 11: Write Down What You Know Now about Retained Earnings:

	Retained Earnings		
	4,320	23,045	
Dividends		Net Income	

Step 12: Refer to your Table 3 page and use the adjusted trial balance figures that were given AND those you have calculated in the preceding steps.

Calculate Total Assets (that will be on the Balance Sheet of 12-31-17):
 Cash 14,890 + A/Rec 8,875 + Prep Ins 860 + MI 33,070 = \$57,695

Calculate Total Liabilities (that will be on the Balance Sheet of 12-31-17):
 A/Pay 2,855 + Div Pay 4,320 = 7,175

Calculate **Ending** Retained Earnings (that will be on the Balance Sheet of 12-31-17):
 Total Assets 57,695 – Total Liab 7,175 – Capital Stock 12,000 = End RE 38,520 **Q#76**

Retained Earnings	
Dividends	4,320
	23,045
	38,520

Net Income

Step 13: Questions #74 and #75 have the same answer. In high school accounting we do not learn about the possibility of any kind of “adjustment” to Retained Earnings. So the beginning balance of Retained Earnings on 1-1-17 will appear in both the Trial Balance Credit column AND the Adjusted Trial Balance Credit column.

The way to calculate Retained Earnings on 1-1-17 is to use the T-account above and work the math backwards:

Ending RE 38,520 – NI 23,045 + Div 4,320 = Beginning RE 19,795 **Q#74** and **Q#75**

Step #14: Questions #77 – 80 can be solved WITHOUT the actual work sheet form. It takes practice to visualize where things are on the work sheet extended columns.

Cash	14,890
Accounts Receivable	8,875
Prepaid Insurance	860
Merchandise Inventory	33,070
Accounts Payable	2,855
Dividends Payable	4,320
Capital Stock	12,000
Retained Earnings	19,795
Dividends	4,320
Income Summary	1,830 CR

Sales	200,140
Sales Discounts	320
Sales Returns & Allowances	1,560
Purchases	112,608
Transportation In	4,885
Purchases Discounts	3,746
Purchases Returns & Allow.	2,874
Insurance Expense	2,540
Various Expenses	63,632

- Q#77** Red = Income Statement Debit column \$185,545
- Q#78** Blue = Income Statement Credit column \$208,590
- Q#79** Green = Balance Sheet Debit column \$62,015
- Q#80** Purple = Balance Sheet Credit column \$38,970

Reality Check:		
Assets	57,695	
Liabilities		7,175
Cap Stock		12,000
Ret Earn		38,520
Totals	57,695	57,695