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Homework 1

Question 1:

Stock options were introduced to solve the long-time principal/agent problem: with the principals being the stockholders and the agents being the management of corporations. Stock options encourage the management to want to grow the stock price, something that the shareholder also wants, by mandating that management has a stake in the stocks themselves.

Question 2:

Apple: <https://www.wsj.com/market-data/quotes/AAPL/financials/annual/balance-sheet>

GME: <https://www.wsj.com/market-data/quotes/GME/financials/annual/balance-sheet>

	Current Assets	Current Liabilities	Equity	Net Working Capital
AAPL 2018	131,339	116,866	107,147	14,473
AAPL 2019	162,819	105,718	90,488	57,101
% Change	+23.97%	-9.54%	-15.55%	+294.53%
GME 2018	3,018	1,931	2,215	1,087
GME 2019	3,128	2,181	1,336	947
% Change	+3.64%	+12.95%	-39.68%	-12.88%

Based on the above chart, one can observe that both companies' **equity** decreased, showing that both companies suffered in their financial health. However, Apple did better due to the very large surplus of **net working capital** they gained through the year, setting them up for more short-term success. However, GameStop saw an increase in their current liabilities and thus a decrease in their **net working capital**.

Question 3:

2018 Balance Sheet

ASSETS		LIABILITIES AND STOCKHOLDERS' EQUITY	
Current assets:		Current liabilities:	
Cash and cash equivalents	\$300	Accounts payable	\$500
Accounts receivable	250	Notes payable	450
Inventories	600	<u>Total current liabilities</u>	<u>\$950</u>
<u>Total current assets</u>	<u>\$1,150</u>	Long-term liabilities:	
Fixed assets:		Long-term debt	\$1,800
Gross fixed assets	\$8,000	<u>Total long-term liabilities</u>	<u>\$1,800</u>
Less accumulated depreciation	2,500	Stockholders' equity:	
<u>Total fixed assets</u>	<u>\$5,500</u>	Accumulated retained earnings	\$3,900
		<u>Total equity</u>	<u>\$3,900</u>
<u>Total assets</u>	<u>\$6,650</u>	<u>Total liabilities</u>	<u>\$6,650</u>

2019 Balance Sheet

ASSETS		LIABILITIES AND STOCKHOLDERS' EQUITY	
Current assets:		Current liabilities:	
Cash and cash equivalents	\$800	Accounts payable	\$300
Accounts receivable	310	Notes payable	317
Inventories	640	<u>Total current liabilities</u>	<u>\$617</u>
<u>Total current assets</u>	<u>\$1,750</u>	Long-term liabilities:	

Fixed assets:		Long-term debt	\$2000
Gross fixed assets	\$8,000	<u>Total long-term liabilities</u>	<u>\$2,000</u>
Less accumulated depreciation	3,000	Stockholders' equity:	
<u>Total fixed assets</u>	<u>\$5,000</u>	Accumulated retained earnings	\$4,133
		<u>Total equity</u>	<u>\$4,133</u>
<u>Total assets</u>	<u>\$6,750</u>	<u>Total liabilities</u>	<u>\$6,750</u>

Question 4:

The assumptions given:

Short term assets/liabilities remain the same. (i.e. no change in current assets/liabilities)

NWC stays the same

No Fixed Assets purchased (property and equipment)

No Dividends Payout

One option that Green Co. has that will still allow them to make a profit of \$120,000 is to reduce retained earnings of \$197,100 by \$77,100. To avoid tweaking current assets and liabilities, the company could increase the common stock that they issue or the additional paid-in capital (APIC) by \$77,100 which meets the target of \$120,000 profit.

Projected Balance Sheet for end of 2021

ASSETS		LIABILITIES AND SHAREHOLDERS' EQUITY	
Current assets		Current liabilities	
Cash and cash equivalents	\$100,000	Accounts payable	\$30,000
Accounts receivable	20,000	Notes payable	10,000
Inventory	15,000	Accrued expenses	5,000
Prepaid expense	4,000	Deferred revenue	2,000
investments	10,000	<u>Total current</u>	<u>47,000</u>

		<u>liabilities</u>	
<u>Total current assets</u>	<u>149,000</u>	Long-term debt	200,000
Property and equipment		Total liabilities	<u>247,000</u>
land	24,300	SHE	
Buildings and improvements	250,000	Common stock	10,000
equipment	50,000	Additional paid-in capital	97,100
Less accumulated depreciation	(5,000)	Retained earnings	120,000
Other assets		Treasury stock	(2,000)
Intangible assets	4,000		
Less accumulated amortization	(200)		
Total assets	<u>\$472,100</u>	Total liabilities and SHE	<u>\$472,100</u>

Question 5:

Goals:

Company wants to have the same Income Statement and Cash Account.

Company does not want to distribute any dividends.

The options open to Perform to achieve the goals listed above would be to:

1. Use accounts receivable towards paying off some accounts payable
2. Use accounts receivable towards paying off some notes payable
3. Use accounts receivable towards purchasing more inventory or vehicles
4. Borrow more money to buy back more stocks