Solutions Manual

Fundamentals of Corporate Finance , 1st edition
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B-1 SOLUTIONS

CHAPTER 1
INTRODUCTION TO CORPORATE FINANCE

Answers to Concepts Review and Critical Thinking Questions

1. Capital budgeting (deciding whether to expand a manufacturing plant), capital structure (deciding whether to issue new equity and use the proceeds to retire outstanding debt), and working capital management (modifying the firm's credit collection policy with its customers).

2. Disadvantages: unlimited liability, limited life, difficulty in transferring ownership, hard to raise capital funds. Some advantages: simpler, less regulation, the owners are also the managers, sometimes personal tax rates are better than corporate tax rates.

3. The primary disadvantage of the corporate form is the double taxation to shareholders of distributed earnings and dividends. Some advantages include: limited liability, ease of transferability, ability to raise capital, and unlimited life.

4. In response to Sarbanes-Oxley, small firms have elected to go dark because of the costs of compliance. The costs to comply with Sarbox can be several million dollars, which can be a large percentage of a small firms profits. A major cost of going dark is less access to capital. Since the firm is no longer publicly traded, it can no longer raise money in the public market. Although the company will still have access to bank loans and the private equity market, the costs associated with raising funds in these markets are usually higher than the costs of raising funds in the public market.

5. The treasurer's office and the controller's office are the two primary organizational groups that report directly to the chief financial officer. The controller's office handles cost and financial accounting, tax management, and management information systems, while the treasurer's office is responsible for cash and credit management, capital budgeting, and financial planning. Therefore, the study of corporate finance is concentrated within the treasury group's functions.

6. To maximize the current market value (share price) of the equity of the firm (whether it's publicly-traded or not).

7. In the corporate form of ownership, the shareholders are the owners of the firm. The shareholders elect the directors of the corporation, who in turn appoint the firm's management. This separation of ownership from control in the corporate form of organization is what causes agency problems to exist. Management may act in its own or someone else's best interests, rather than those of the shareholders. If such events occur, they may contradict the goal of maximizing the share price of the equity of the firm.

8. A primary market transaction.

9. In auction markets like the NYSE, brokers and agents meet at a physical location (the exchange) to match buyers and sellers of assets. Dealer markets like NASDAQ consist of dealers operating at dispersed locales who buy and sell assets themselves, communicating with other dealers either electronically or literally over-the-counter.

10. Such organizations frequently pursue social or political missions, so many different goals are conceivable. One goal that is often cited is revenue minimization; i.e., provide whatever goods and services are offered at the lowest possible cost to society. A better approach might be to observe that even a not-for-profit business has equity. Thus, one answer is that the appropriate goal is to maximize the value of the equity.

11. Presumably, the current stock value reflects the risk, timing, and magnitude of all future cash flows, both short-term *and* long-term. If this is correct, then the statement is false.

12. An argument can be made either way. At the one extreme, we could argue that in a market economy, all of these things are priced. There is thus an optimal level of, for example, ethical and/or illegal behavior, and the framework of stock valuation explicitly includes these. At the other extreme, we could argue that these are non-economic phenomena and are best handled through the political process. A classic (and highly relevant) thought question that illustrates this debate goes something like this: "A firm has estimated that the cost of improving the safety of one of its products is $30 million. However, the firm believes that improving the safety of the product will only save $20 million in product liability claims. What should the firm do?"

13. The goal will be the same, but the best course of action toward that goal may be different because of differing social, political, and economic institutions.

14. The goal of management should be to maximize the share price for the current shareholders. If management believes that it can improve the profitability of the firm so that the share price will exceed $35, then they should fight the offer from the outside company. If management believes that this bidder or other unidentified bidders will actually pay more than $35 per share to acquire the company, then they should still fight the offer. However, if the current management cannot increase the value of the firm beyond the bid price, and no other higher bids come in, then management is not acting in the interests of the shareholders by fighting the offer. Since current managers often lose their jobs when the corporation is acquired, poorly monitored managers have an incentive to fight corporate takeovers in situations such as this.

15. We would expect agency problems to be less severe in countries with a relatively small percentage of individual ownership. Fewer individual owners should reduce the number of diverse opinions concerning corporate goals. The high percentage of institutional ownership might lead to a higher degree of agreement between owners and managers on decisions concerning risky projects. In addition, institutions may be better able to implement effective monitoring mechanisms on managers than can individual owners, based on the institutions' deeper resources and experiences with their own management. The increase in institutional ownership of stock in the United States and the growing activism of these large shareholder groups may lead to a reduction in agency problems for U.S. corporations and a more efficient market for corporate control.

16. How much is too much? Who is worth more, Ray Irani or Tiger Woods? The simplest answer is that there is a market for executives just as there is for all types of labor. Executive compensation is the price that clears the market. The same is true for athletes and performers. Having said that, one aspect of executive compensation deserves comment. A primary reason executive compensation has grown so dramatically is that companies have increasingly moved to stock-based compensation. Such movement is obviously consistent with the attempt to better align stockholder and management interests. In recent years, stock prices have soared, so management has cleaned up. It is sometimes argued that much of this reward is simply due to rising stock prices in general, not managerial performance. Perhaps in the future, executive compensation will be designed to reward only differential performance, i.e., stock price increases in excess of general market increases.

CHAPTER 2
FINANCIAL STATEMENTS, TAXES AND CASH FLOW

Answers to Concepts Review and Critical Thinking Questions

1. Liquidity measures how quickly and easily an asset can be converted to cash without significant loss in value. It's desirable for firms to have high liquidity so that they have a large factor of safety in meeting short-term creditor demands. However, since liquidity also has an opportunity cost associated with it—namely that higher returns can generally be found by investing the cash into productive assets—low liquidity levels are also desirable to the firm. It's up to the firm's financial management staff to find a reasonable compromise between these opposing needs.

2. The recognition and matching principles in financial accounting call for revenues, and the costs associated with producing those revenues, to be "booked" when the revenue process is essentially complete, not necessarily when the cash is collected or bills are paid. Note that this way is not necessarily correct; it's the way accountants have chosen to do it.

3. Historical costs can be objectively and precisely measured whereas market values can be difficult to estimate, and different analysts would come up with different numbers. Thus, there is a tradeoff between relevance (market values) and objectivity (book values).

4. Depreciation is a non-cash deduction that reflects adjustments made in asset book values in accordance with the matching principle in financial accounting. Interest expense is a cash outlay, but it's a financing cost, not an operating cost.

5. Market values can never be negative. Imagine a share of stock selling for –$20. This would mean that if you placed an order for 100 shares, you would get the stock along with a check for $2,000. How many shares do you want to buy? More generally, because of corporate and individual bankruptcy laws, net worth for a person or a corporation cannot be negative, implying that liabilities cannot exceed assets in market value.

6. For a successful company that is rapidly expanding, for example, capital outlays will be large, possibly leading to negative cash flow from assets. In general, what matters is whether the money is spent wisely, not whether cash flow from assets is positive or negative.

7. It's probably not a good sign for an established company, but it would be fairly ordinary for a start-up, so it depends.

8. For example, if a company were to become more efficient in inventory management, the amount of inventory needed would decline. The same might be true if it becomes better at collecting its receivables. In general, anything that leads to a decline in ending NWC relative to beginning would have this effect. Negative net capital spending would mean more long-lived assets were liquidated than purchased.

9. If a company raises more money from selling stock than it pays in dividends in a particular period, its cash flow to stockholders will be negative. If a company borrows more than it pays in interest, its cash flow to creditors will be negative.

10. The adjustments discussed were purely accounting changes; they had no cash flow or market value consequences unless the new accounting information caused stockholders to revalue the derivatives.

11. Enterprise value is the theoretical takeover price. In the event of a takeover, an acquirer would have to take on the company's debt, but would pocket its cash. Enterprise value differs significantly from simple market capitalization in several ways, and it may be a more accurate representation of a firm's value. In a takeover, the value of a firm's debt would need to be paid by the buyer when taking over a company. This enterprise value provides a much more accurate takeover valuation because it includes debt in its value calculation.

12. In general, it appears that investors prefer companies that have a steady earnings stream. If true, this encourages companies to manage earnings. Under GAAP, there are numerous choices for the way a company reports its financial statements. Although not the reason for the choices under GAAP, one outcome is the ability of a company to manage earnings, which is not an ethical decision. Even though earnings and cash flow are often related, earnings management should have little effect on cash flow (except for tax implications). If the market is "fooled" and prefers steady earnings, shareholder wealth can be increased, at least temporarily. However, given the questionable ethics of this practice, the company (and shareholders) will lose value if the practice is discovered.

Solutions to Questions and Problems

NOTE: All end of chapter problems were solved using a spreadsheet. Many problems require multiple steps. Due to space and readability constraints, when these intermediate steps are included in this solutions manual, rounding may appear to have occurred. However, the final answer for each problem is found without rounding during any step in the problem.

Basic

1. To find owner's equity, we must construct a balance sheet as follows:

Balance Sheet

CA	$5,100	CL	$4,300
NFA	23,800	LTD	7,400
		OE	??
TA	$28,900	TL & OE	$28,900

We know that total liabilities and owner's equity (TL & OE) must equal total assets of $28,900. We also know that TL & OE is equal to current liabilities plus long-term debt plus owner's equity, so owner's equity is:

OE = $28,900 – 7,400 – 4,300 = $17,200

NWC = CA – CL = $5,100 – 4,300 = $800

2. The income statement for the company is:

Income Statement	
Sales	$586,000
Costs	247,000
Depreciation	43,000
EBIT	$296,000
Interest	32,000
EBT	$264,000
Taxes(35%)	92,400
Net income	$171,600

3. One equation for net income is:

Net income = Dividends + Addition to retained earnings

Rearranging, we get:

Addition to retained earnings = Net income – Dividends = $171,600 – 73,000 = $98,600

4. EPS = Net income / Shares = $171,600 / 85,000 = $2.02 per share

DPS = Dividends / Shares = $73,000 / 85,000 = $0.86 per share

5. To find the book value of current assets, we use: NWC = CA – CL. Rearranging to solve for current assets, we get:

CA = NWC + CL = $380,000 + 1,100,000 = $1,480,000

The market value of current assets and fixed assets is given, so:

Book value CA	= $1,480,000	Market value CA	= $1,600,000
Book value NFA	= $3,700,000	Market value NFA	= $4,900,000
Book value assets	= $5,180,000	Market value assets	= $6,500,000

6. Taxes = 0.15($50K) + 0.25($25K) + 0.34($25K) + 0.39($236K – 100K) = $75,290

7. The average tax rate is the total tax paid divided by net income, so:

Average tax rate = $75,290 / $236,000 = 31.90%

The marginal tax rate is the tax rate on the next $1 of earnings, so the marginal tax rate = 39%.

8. To calculate OCF, we first need the income statement:

Income Statement	
Sales	\$27,500
Costs	13,280
Depreciation	2,300
EBIT	\$11,920
Interest	1,105
Taxable income	\$10,815
Taxes (35%)	3,785
Net income	\$ 7,030

OCF = EBIT + Depreciation – Taxes = \$11,920 + 2,300 – 3,785 = \$10,435

9. Net capital spending = NFA_{end} – NFA_{beg} + Depreciation
Net capital spending = \$4,200,000 – 3,400,000 + 385,000
Net capital spending = \$1,185,000

10. Change in NWC = NWC_{end} – NWC_{beg}
Change in NWC = (CA_{end} – CL_{end}) – (CA_{beg} – CL_{beg})
Change in NWC = (\$2,250 – 1,710) – (\$2,100 – 1,380)
Change in NWC = \$540 – 720 = –\$180

11. Cash flow to creditors = Interest paid – Net new borrowing
Cash flow to creditors = Interest paid – (LTD_{end} – LTD_{beg})
Cash flow to creditors = \$170,000 – (\$2,900,000 – 2,600,000)
Cash flow to creditors = –\$130,000

12. Cash flow to stockholders = Dividends paid – Net new equity
Cash flow to stockholders = Dividends paid – [($Common_{end}$ + $APIS_{end}$) – ($Common_{beg}$ + $APIS_{beg}$)]
Cash flow to stockholders = \$490,000 – [(\$815,000 + 5,500,000) – (\$740,000 + 5,200,000)]
Cash flow to stockholders = \$115,000

Note, APIS is the additional paid-in surplus.

13. Cash flow from assets = Cash flow to creditors + Cash flow to stockholders
= –\$130,000 + 115,000 = –\$15,000

Cash flow from assets = –\$15,000 = OCF – Change in NWC – Net capital spending
= –\$15,000 = OCF – (–\$85,000) – 940,000

Operating cash flow = –\$15,000 – 85,000 + 940,000
Operating cash flow = \$840,000

Intermediate

14. To find the OCF, we first calculate net income.

Income Statement	
Sales	$196,000
Costs	104,000
Other expenses	6,800
Depreciation	9,100
EBIT	$76,100
Interest	14,800
Taxable income	$61,300
Taxes	21,455
Net income	$39,845
Dividends	$10,400
Additions to RE	$29,445

a. OCF = EBIT + Depreciation – Taxes = $76,100 + 9,100 – 21,455 = $63,745

b. CFC = Interest – Net new LTD = $14,800 – (–7,300) = $22,100

Note that the net new long-term debt is negative because the company repaid part of its long-term debt.

c. CFS = Dividends – Net new equity = $10,400 – 5,700 = $4,700

d. We know that CFA = CFC + CFS, so:

CFA = $22,100 + 4,700 = $26,800

CFA is also equal to OCF – Net capital spending – Change in NWC. We already know OCF. Net capital spending is equal to:

Net capital spending = Increase in NFA + Depreciation = $27,000 + 9,100 = $36,100

Now we can use:

CFA = OCF – Net capital spending – Change in NWC
$26,800 = $63,745 – 36,100 – Change in NWC

Solving for the change in NWC gives $845, meaning the company increased its NWC by $845.

15. The solution to this question works the income statement backwards. Starting at the bottom:

Net income = Dividends + Addition to ret. earnings = $1,500 + 5,100 = $6,600

Now, looking at the income statement:

EBT – EBT × Tax rate = Net income

Recognize that EBT × Tax rate is simply the calculation for taxes. Solving this for EBT yields:

EBT = NI / (1– tax rate) = $6,600 / (1 – 0.35) = $10,154

Now you can calculate:

EBIT = EBT + Interest = $10,154 + 4,500 = $14,654

The last step is to use:

EBIT = Sales – Costs – Depreciation
$14,654 = $41,000 – 19,500 – Depreciation

Solving for depreciation, we find that depreciation = $6,846

16. The balance sheet for the company looks like this:

Balance Sheet

Cash	$195,000	Accounts payable	$405,000
Accounts receivable	137,000	Notes payable	160,000
Inventory	264,000	Current liabilities	$565,000
Current assets	$596,000	Long-term debt	1,195,300
		Total liabilities	$1,760,300
Tangible net fixed assets	2,800,000		
Intangible net fixed assets	780,000	Common stock	??
		Accumulated ret. earnings	1,934,000
Total assets	$4,176,000	Total liab. & owners' equity	$4,176,000

Total liabilities and owners' equity is:

TL & OE = CL + LTD + Common stock + Retained earnings

Solving for this equation for equity gives us:

Common stock = $4,176,000 – 1,934,000 – 1,760,300 = $481,700

17. The market value of shareholders' equity cannot be negative. A negative market value in this case would imply that the company would pay you to own the stock. The market value of shareholders' equity can be stated as: Shareholders' equity = Max [(TA – TL), 0]. So, if TA is $8,400, equity is equal to $1,100, and if TA is $6,700, equity is equal to $0. We should note here that the book value of shareholders' equity can be negative.

18. *a.* Taxes Growth = 0.15($50,000) + 0.25($25,000) + 0.34($13,000) = $18,170
Taxes Income = 0.15($50,000) + 0.25($25,000) + 0.34($25,000) + 0.39($235,000)
+ 0.34($8,465,000)
= $2,992,000

b. Each firm has a marginal tax rate of 34% on the next $10,000 of taxable income, despite their different average tax rates, so both firms will pay an additional $3,400 in taxes.

19.

Income Statement	
Sales	$730,000
COGS	580,000
A&S expenses	105,000
Depreciation	135,000
EBIT	–$90,000
Interest	75,000
Taxable income	–$165,000
Taxes (35%)	0
a. Net income	–$165,000

b. OCF = EBIT + Depreciation – Taxes = –$90,000 + 135,000 – 0 = $45,000

c. Net income was negative because of the tax deductibility of depreciation and interest expense. However, the actual cash flow from operations was positive because depreciation is a non-cash expense and interest is a financing expense, not an operating expense.

20. A firm can still pay out dividends if net income is negative; it just has to be sure there is sufficient cash flow to make the dividend payments.

Change in NWC = Net capital spending = Net new equity = 0. (Given)
Cash flow from assets = OCF – Change in NWC – Net capital spending
Cash flow from assets = $45,000 – 0 – 0 = $45,000
Cash flow to stockholders = Dividends – Net new equity = $25,000 – 0 = $25,000
Cash flow to creditors = Cash flow from assets – Cash flow to stockholders
Cash flow to creditors = $45,000 – 25,000 = $20,000
Cash flow to creditors = Interest – Net new LTD
Net new LTD = Interest – Cash flow to creditors = $75,000 – 20,000 = $55,000

21. *a.*

Income Statement	
Sales	$22,800
Cost of goods sold	16,050
Depreciation	4,050
EBIT	$ 2,700
Interest	1,830
Taxable income	$ 870
Taxes (34%)	296
Net income	$ 574

b. OCF = EBIT + Depreciation – Taxes
= $2,700 + 4,050 – 296 = $6,454

c. Change in NWC $= NWC_{end} – NWC_{beg}$
$= (CA_{end} – CL_{end}) – (CA_{beg} – CL_{beg})$
= ($5,930 – 3,150) – ($4,800 – 2,700)
= $2,780 – 2,100 = $680

Net capital spending $= NFA_{end} – NFA_{beg}$ + Depreciation
= $16,800 – 13,650 + 4,050 = $7,200

CFA = OCF – Change in NWC – Net capital spending
= $6,454 – 680 – 7,200 = –$1,426

The cash flow from assets can be positive or negative, since it represents whether the firm raised funds or distributed funds on a net basis. In this problem, even though net income and OCF are positive, the firm invested heavily in both fixed assets and net working capital; it had to raise a net $1,426 in funds from its stockholders and creditors to make these investments.

d. Cash flow to creditors = Interest – Net new LTD = $1,830 – 0 = $1,830
Cash flow to stockholders = Cash flow from assets – Cash flow to creditors
= –$1,426 – 1,830 = –$3,256

We can also calculate the cash flow to stockholders as:

Cash flow to stockholders = Dividends – Net new equity

Solving for net new equity, we get:

Net new equity = $1,300 – (–3,256) = $4,556

The firm had positive earnings in an accounting sense (NI > 0) and had positive cash flow from operations. The firm invested $680 in new net working capital and $7,200 in new fixed assets. The firm had to raise $1,426 from its stakeholders to support this new investment. It accomplished this by raising $4,556 in the form of new equity. After paying out $1,300 of this in the form of dividends to shareholders and $1,830 in the form of interest to creditors, $1,426 was left to meet the firm's cash flow needs for investment.

22. *a.* Total assets 2008 = $653 + 2,691 = $3,344
Total liabilities 2008 = $261 + 1,422 = $1,683
Owners' equity 2008 = $3,344 – 1,683 = $1,661

Total assets 2009 = $707 + 3,240 = $3,947
Total liabilities 2009 = $293 + 1,512 = $1,805
Owners' equity 2009 = $3,947 – 1,805 = $2,142

b. NWC 2008 = CA08 – CL08 = $653 – 261 = $392
NWC 2009 = CA09 – CL09 = $707 – 293 = $414
Change in NWC = NWC09 – NWC08 = $414 – 392 = $22

c. We can calculate net capital spending as:

Net capital spending = Net fixed assets 2009 – Net fixed assets 2008 + Depreciation
Net capital spending = \$3,240 – 2,691 + 738 = \$1,287

So, the company had a net capital spending cash flow of \$1,287. We also know that net capital spending is:

Net capital spending = Fixed assets bought – Fixed assets sold
\$1,287 = \$1,350 – Fixed assets sold
Fixed assets sold = \$1,350 – 1,287 = \$63

To calculate the cash flow from assets, we must first calculate the operating cash flow. The income statement is:

Income Statement

Sales	\$ 8,280.00
Costs	3,861.00
Depreciation expense	738 .00
EBIT	\$3,681.00
Interest expense	211 .00
EBT	\$3,470.00
Taxes (35%)	1,215.50
Net income	\$2,256.50

So, the operating cash flow is:

OCF = EBIT + Depreciation – Taxes = \$3,681 + 738 – 1,214.50 = \$3,204.50

And the cash flow from assets is:

Cash flow from assets = OCF – Change in NWC – Net capital spending.
= \$3,204.50 – 22 – 1,287 = \$1,895.50

d. Net new borrowing = LTD09 – LTD08 = \$1,512 – 1,422 = \$90
Cash flow to creditors = Interest – Net new LTD = \$211 – 90 = \$121
Net new borrowing = \$90 = Debt issued – Debt retired
Debt retired = \$270 – 90 = \$180

<u>*Challenge*</u>

23. Net capital spending = $NFA_{end} - NFA_{beg}$ + Depreciation
= $(NFA_{end} - NFA_{beg})$ + (Depreciation + AD_{beg}) – AD_{beg}
= $(NFA_{end} - NFA_{beg}) + AD_{end} - AD_{beg}$
= $(NFA_{end} + AD_{end}) - (NFA_{beg} + AD_{beg}) = FA_{end} - FA_{beg}$

24. *a.* The tax bubble causes average tax rates to catch up to marginal tax rates, thus eliminating the tax advantage of low marginal rates for high income corporations.

b. Taxes = 0.15($50,000) + 0.25($25,000) + 0.34($25,000) + 0.39($235,000) = $113,900

Average tax rate = $113,900 / $335,000 = 34%

The marginal tax rate on the next dollar of income is 34 percent.

For corporate taxable income levels of $335,000 to $10 million, average tax rates are equal to marginal tax rates.

Taxes = 0.34($10,000,000) + 0.35($5,000,000) + 0.38($3,333,333)= $6,416,667

Average tax rate = $6,416,667 / $18,333,334 = 35%

The marginal tax rate on the next dollar of income is 35 percent. For corporate taxable income levels over $18,333,334, average tax rates are again equal to marginal tax rates.

c. Taxes = 0.34($200,000) = $68,000
$68,000 = 0.15($50,000) + 0.25($25,000) + 0.34($25,000) + X($100,000);
X($100,000) = $68,000 – 22,250
X = $45,750 / $100,000
X = 45.75%

25.

Balance sheet as of Dec. 31, 2008

Cash	$3,792	Accounts payable	$3,984
Accounts receivable	5,021	Notes payable	732
Inventory	8,927	Current liabilities	$4,716
Current assets	$17,740		
		Long-term debt	$12,700
Net fixed assets	$31,805	Owners' equity	32,129
Total assets	$49,545	Total liab. & equity	$49,545

Balance sheet as of Dec. 31, 2009

Cash	$4,041	Accounts payable	$4,025
Accounts receivable	5,892	Notes payable	717
Inventory	9,555	Current liabilities	$4,742
Current assets	$19,488		
		Long-term debt	$15,435
Net fixed assets	$33,921	Owners' equity	33,232
Total assets	$53,409	Total liab. & equity	$53,409

2008 Income Statement	
Sales	$7,233.00
COGS	2,487.00
Other expenses	591.00
Depreciation	1,038.00
EBIT	$3,117.00
Interest	485.00
EBT	$2,632.00
Taxes (34%)	894.88
Net income	$1,737.12
Dividends	$882.00
Additions to RE	855.12

2009 Income Statement	
Sales	$8,085.00
COGS	2,942.00
Other expenses	515.00
Depreciation	1,085.00
EBIT	$3,543.00
Interest	579.00
EBT	$2,964.00
Taxes (34%)	1,007.76
Net income	$1,956.24
Dividends	$1,011.00
Additions to RE	945.24

26. OCF = EBIT + Depreciation – Taxes = $3,543 + 1,085 – 1,007.76 = $3,620.24

Change in NWC = NWC_{end} – NWC_{beg} = $(CA – CL)_{end}$ – $(CA – CL)_{beg}$
= ($19,488 – 4,742) – ($17,740 – 4,716)
= $1,722

Net capital spending = NFA_{end} – NFA_{beg} + Depreciation
= $33,921 – 31,805 + 1,085 = $3,201

Cash flow from assets = OCF – Change in NWC – Net capital spending
= $3,620.24 – 1,722 – 3,201 = –$1,302.76

Cash flow to creditors = Interest – Net new LTD
Net new LTD = LTD_{end} – LTD_{beg}
Cash flow to creditors = $579 – ($15,435 – 12,700) = –$2,156

Net new equity = Common $stock_{end}$ – Common $stock_{beg}$
Common stock + Retained earnings = Total owners' equity
Net new equity = $(OE – RE)_{end}$ – $(OE – RE)_{beg}$
= OE_{end} – OE_{beg} + RE_{beg} – RE_{end}
RE_{end} = RE_{beg} + Additions to RE08
∴ Net new equity = OE_{end} – OE_{beg} + RE_{beg} – (RE_{beg} + Additions to RE08)
= OE_{end} – OE_{beg} – Additions to RE
Net new equity = $33,232 – 32,129 – 945.24 = $157.76

CFS = Dividends – Net new equity
CFS = $1,011 – 157.76 = $853.24

As a check, cash flow from assets is –$1,302.76.

CFA = Cash flow from creditors + Cash flow to stockholders
CFA = –$2,156 + 853.24 = –$1,302.76