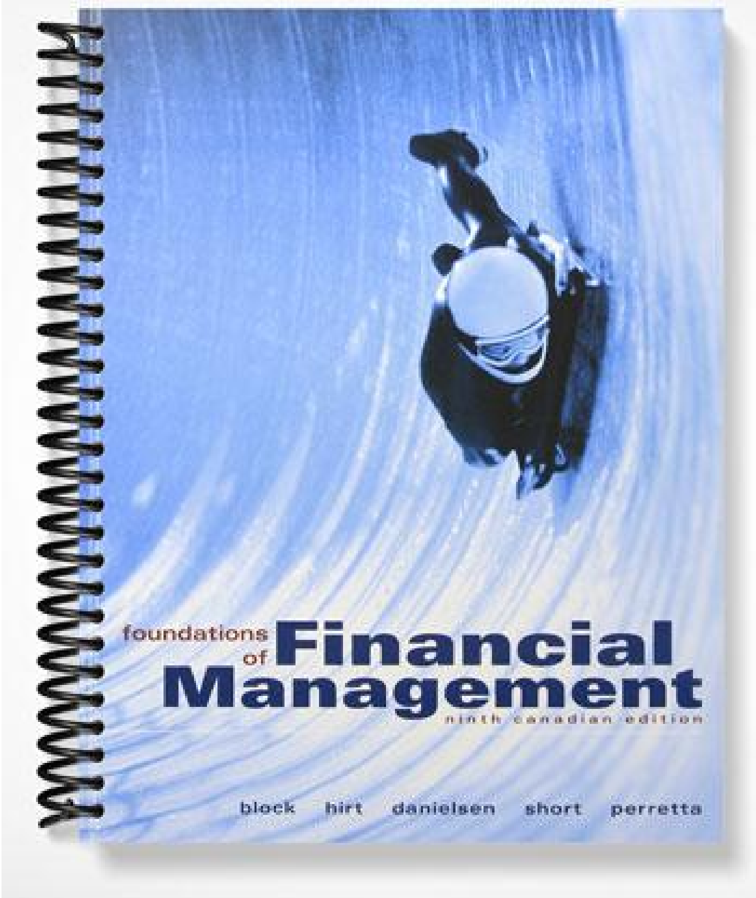
SOLUTIONS MANUAL



Discussion Questions

2-1. The price-earnings ratio will be influenced by the earnings and sales growth of the firm, the risk or volatility in performance, the debt-equity structure of the firm, the dividend payment policy, the quality of management, and a number of other factors. The ratio tends to be future-oriented, and will be higher the more positive the outlook

2-2. Book value per share is arrived at by taking the cost of the assets and subtracting out liabilities and preferred stock and dividing by the number of common shares outstanding. It is based on the historical costs of the assets. Market value per share is based on current assessed value of the firm in the marketplace and may bear little relationship to original cost. Besides the disparity between book and market value caused by the historical cost approach, other contributing factors are the growth prospects for the firm, the quality of management, and the industry outlook. To the extent these are quite negative, or positive, market value may differ widely from book value.

2-3. The only way amortization generates cash flows for the company is by serving as a tax shield against reported income. Allowable amortization for tax purposes is known as capital cost allowance (CCA). In most instances this will be different than accounting amortization. This non-cash deduction may provide cash flow equal to the tax rate times the amortization charged. This much in taxes will be saved, while no cash payments occur.

2-4. Accumulated amortization is the sum of all past and present amortization charges, while amortization expense is the current year's charge. They are related in that the sum of all prior amortization expense should be equal to accumulated amortization (subject to some differential related to asset write-offs).

2-5. The balance sheet, for private companies, is based on historical costs. When prices are rising rapidly, historical cost data may lose much of their meaning - particularly for plant, equipment and inventory. However, the balance sheet of public companies using IFRS is based on market values and opposite order whereby non-current assets are listed ahead of current assets. The same applies to the liabilities section that lists non-current liabilities first.

2-6. The income statement and balance sheet are based on the accrual method of accounting, which attempts to match revenues and expenses in the period in which they occur. However, accrual accounting does not attempt to properly assess the cash flow position of the firm. The statement of changes in financial position fulfills this need. The values on these statements will differ for public companies using IFRS compared to private firms.

2-7. The sections of the statement of cash flows and sources of information are:

Cash flows from operating activities (Income statement)
Cash flows from investing activities (non-current assets section of balance sheet)
Cash flows from financing activities (non-current liabilities and equity section)

The payment of cash dividends falls into the financing activities category.

2-8. We can examine the various sources that were utilized by the firm as indicated on the statement. Possible sources for the financing of an increase in assets might be profits, increases in liabilities, or decreases in other asset accounts.

2-9. Free cash flow is equal to cash flow from operating activities:

Minus: Capital expenditures required to maintain the productive capacity of the firm.

Minus: Dividends (required to maintain the payout on common stock and to cover any preferred stock obligation).

The analyst or banker normally looks at free cash flow to determine whether there are sufficient excess funds to pay back the loan associated with the leveraged buy-out (a company with limited cash acquiring stocks of another company to acquire control).

2-10. Interest expense is a tax deductible item to the corporation, while dividend payments are not. The net cost to the corporation of interest expense is the amount paid multiplied by the difference of (one minus the applicable tax rate). The firm must bear the full burden of the cash outflow of dividend payments because they are not an expense, but rather a distribution out of retained earnings.

Internet Resources and Questions

1. www.cica.ca
2. www.cma-canada.org
3. www.cga-canada.org
4. www.iasb.org.
5. www.kpmg.ca/taxi
6. www.pwc.com/ca/tax
7. www.cra-arc.gc.ca

Problems

(The following solutions use the 2010 tax rates in the text. The 2012 rates are also shown but subject to change).

2-1. **Hansen Auto Parts**
Income Statement

Sales	$470,000
Cost of goods sold	140,000
Gross Profit	330,000
Selling and administrative expense	60,000
Amortization expense	70,000
Operating profit	200,000
Interest expense	40,000
Earnings before taxes	160,000
Taxes (22%)	35,200
Earnings after taxes	**$124,800**

2-2. Virginia Slim Wear
Income Statement

Sales…………………………………………………	$600,000
Cost of goods sold………………………………..	200,000
Gross profit……………………………...…..	400,000
Selling and administration expense……………….	40,000
Amortization expense……………………………..	20,000
Operating profit………………………………..	340,000
Interest expense…………………………………….	30,000
Earnings before taxes…………………………..	310,000
Taxes ………………………………………………..	100,000
Earnings after taxes…………………………….	210,000
Preferred stock dividends………………………….	80,000
Earnings available to common shareholders……..	$130,000
Shares outstanding………………………………..	100,000
Earnings per share………………………………..	**$1.30**

2-3. Far East Fast Foods

a. **2011**

Earnings after taxes	$230,000
Shares outstanding	200,000
Earnings per share	**$1.15**

b. **2012**

Earnings after taxes ($230,000 × 125%)	$287,500
Shares outstanding	230,000
Earnings per share	**$1.25**

2-4. Sheridan Travel

a. $\text{EPS} = \dfrac{\$600,000}{300,000} = \mathbf{\$2.00\ per\ share}$

b. New Net Income: $600,000 x 125% = $750,000
Shares: 300,000 + 40,000 = 340,000 shares
New EPS = $\dfrac{750,000}{340,000} = \mathbf{\$2.21\ per\ share}$

2-5. Kevin Bacon and Pork Company

a.	Sales	$240,000
	Cost of goods sold	108,000
	Gross profit	132,000

$$\text{Gross profit (\%)} = \frac{\text{Gross profit}}{\text{Sales}} = \frac{\$132,000}{\$240,000} = .55 = 55\%$$

With a gross profit of 55%, Kevin Bacon and Pork Company is under performing the industry average of 60%.

2-6. **Aztec Book Company**
Income Statement
For the Year ended December 31, 2012

Sales (1,400 books at $84 each)	$117,600
Cost of goods sold (1,400 books at $63 each)	88,200
Gross Profit	29,400
Selling expense	2,000
Amortization expense	5,000
Operating profit	22,400
Interest expense	5,000
Earnings before taxes	17,400
Taxes @ 20%	3,480
Earnings after taxes	**$13,920**

2-7. **Carr Auto Wholesalers**
Income Statement

a.

Sales	$900,000
Cost of goods sold @ 65%	585,000
Gross profit	315,000
Selling and administration expense @ 9%	81,000
Amortization expense	10,000
Operating profit	224,000
Interest expense	8,000
Earnings before taxes	216,000
Taxes @ 30%	64,800
Earnings after taxes	**$151,200**

b.

Sales……………………………………………..	$1,000,000
Cost of goods sold @ 60%..................................	600,000
Gross profit…………………………………...	400,000
Selling and administration expense @ 12%.........	120,000
Amortization expense………………………..…..	10,000
Operating profit………………………………	270,000
Interest expense…………………………………	15,000
Earnings before taxes…………………………	255,000
Taxes @ 30% …………………………………….	76,500
Earnings after taxes……………………………	**$ 178,500**

Ms. Hood's idea will increase profitability.

2-8.

Sales

Cost of goods sold

Gross profit

Selling and administrative expense

Amortization expense

Operating profit

Interest expense

Earnings before taxes

Taxes

Earnings after taxes

Preferred stock dividends

Earnings available to common shareholders

Shares outstanding

Earnings per share

2-9. David's Magic Stores

a. Operating profit (EBIT).........................	$210,000
Interest expense................................	30,000
Earnings before taxes (EBT).................	180,000
Taxes...	59,300
Earnings after taxes (EAT).....................	120,700
Preferred dividends	24,700
Available to common shareholders........	$ 96,000
Common dividends............................	36,000
Increase in retained earnings.................	$ 60,000

Earnings per Share = $\dfrac{\text{Earnings available to common shareholders}}{\text{Number of shares of common stock outstanding}}$

= $96,000/16,000 shares

= **$6.00 per share**

Dividends per Share = $36,000/16,000 shares = **$2.25 per share**

b. Payout ratio = $2.25/ $6.00 = .375 = **37.5%**

c. Increase in retained earnings = $60,000

d. Price/earnings ratio = $90/ $6.00

= 15.0

2-10. Thermo Dynamics

a. Retained earnings, December 31, 2011.............	$450,000
Less: Retained earnings, December 31, 2012....	400,000
Change in retained earnings..............................	50,000
Add: Common stock dividends.........................	25,000
Earnings available to common shareholders......	$ 75,000

b. Earnings per share = $75,000/ 20,000 shares

= **$3.75 per share**

c. Payout ratio = $25,000/ $75,000 = .333 = **33%**
d. Price/earnings ratio = $30.00/ $3.75 = 8x

2-11. **Brandon Fast Foods Inc.**

a. Operating Income $210,000 – Taxes $59,300 – Interest $30,000 = Net income after taxes $120,700

EPS = $96,000 / 16,000 shares = **$6.00 EPS**

Common Dividend Per Share = Div. paid $36,000/16,000 shares = **$2.25 Div. Per Share**

b. Increase in RE = Income $120,700 – Common Dividends $24,700 = **$60,000.**

2-12.
Common stock – noncurrent
Accounts payable – current
Preferred stock – noncurrent
Prepaid expenses – current
Bonds payable – noncurrent
Inventory – current
Investments – noncurrent
Marketable securities – current
Accounts receivable – current
Plant and equipment – noncurrent
Accrued wages payable – current
Retained earnings – noncurrent

2-13. **Assets**

Current Assets		
Cash..		$ 10,000
Marketable securities.........................		20,000
Accounts receivable..........................	$48,000	
Less: Allowance for bad debts......	6,000	
		42,000
Inventory...		66,000
Total Current Assets................		138,000
Other Assets:		
Investments.......................................		20,000
Capital Assets:		
Plant and equipment.........................	680,000	
Less: Accumulated amortization..	300,000	
Net plant and equipment..................		380,000
Total Assets...		$538,000

Liabilities and Shareholders' Equity

Current Liabilities:	
Accounts payable..............................	$ 35,000
Notes payable...................................	33,000
Total current Liabilities...............	68,000
Long-Term Liabilities...........................	
Bonds payable..................................	136,000
Total Liabilities............................	204,000
Shareholders' Equity:	
Preferred stock, 1,000 shares outstanding….....	50,000
Common stock, 100,000 shares outstanding....	188,000

Retained earnings...	96,000
Total Shareholders' Equity..........................	334,000
Total Liabilities and Shareholders' Equity…….....	$538,000

2-14.

Bengal Wood Company

Current assets……………………..	$100,000
Capital assets………………………	140,000
Total assets………………………..	240,000
– Current liabilities………………..	60,000
– Long-term liabilities……………..	90,000
Shareholders' equity………………	90,000
– Preferred stock obligation………..	20,000
Net worth assigned to common……	$ 70,000
Common shares outstanding………	17,500
Book value (net worth) per share…	**$4.00**

2-15. **Monique's Boutique**

a. Total assets.....................................	$600,000
– Current liabilities.........................	150,000
– Long-term liabilities...................	120,000
Shareholders' equity........................	330,000
– Preferred stock.............................	75,000
Net worth assigned to common.......	$255,000
Common shares outstanding…..........	30,000
Book value (net worth) per share….....	**$8.50**
b. Earnings available to common.........	$33,600
Shares outstanding...........................	30,000
Earnings per share...........................	**$1.12**

P/E ratio × earnings per share	= price
12 × $1.12	= **$13.44**

c. Market value per share (price) to book value per share

$13.44/$8.50	= **1.58**

2-16. Phelps Labs

a.

Total assets.....................................	$1,800,000
– Current liabilities........................	595,000
– Long-term liabilities...................	630,000
Shareholders' equity.......................	575,000
– Preferred stock.............................	165,000
Net worth assigned to common.......	$ 410,000
Common shares outstanding…............	20,000
Book value (net worth) per share….....	**$20.50**

b.

Earnings available to common.........	$45,000
Shares outstanding...........................	20,000
Earnings per share...........................	**$2.25**

P/E ratio × earnings per share = price
13 × $2.25= **$29.25**

c. Market value per share (price) to book value per share

$29.25/$20.50	= **1.43**

2-17. Phelps Labs (Continued)

2 × book value	= price
2 × $20.5	= $41.00
P/E ratio	= $41.00/$2.25

= **18.22**

2-18.

1. Balance Sheet (BS)
2. Income Statement (IS)
3. Current Assets (CA)
4. Capital Assets (Cap A)
5. Current Liabilities (CL)
6. Long-Term Liabilities (LL)
7. Shareholders Equity (SE)

Indicate Whether the Item is on Balance Sheet or Income Statement	***If the Item is on Balance Sheet, Designate Which Category***	***Item***
BS	SE	Retained earnings
IS		Income tax expense
BS	CA	Accounts receivable
BS	SE	Common stock
BS	LL	Bonds payable maturity 2012
BS	CL	Notes payable (6 months)
IS		Net income (EAT)
IS		Selling and adm. expenses
BS	CA	Inventories
BS	CL	Accrued expenses
BS	CA	Cash
BS	Cap A	Plant and equipment
IS		Sales
IS		Operating expenses

Indicate Whether the Item is on Balance Sheet or Income Statement	***If the Item is on Balance Sheet, Designate Which Category***	***Item***
BS	SE	Retained earnings
BS	CA	Marketable securities
BS	CL	Accounts payable
IS		Interest expense
BS	CL	Income tax payable

2-19. Increase in inventory -- decreases cash flow (use)
Decrease in prepaid expenses -- increases cash flow (source)
Decrease in accounts receivable -- increases cash flow (source)
Increase in cash -- decreases cash flow (use)
Decrease in inventory -- increases cash flow (source)
Dividend payment -- decreases cash flow (use)
Increase in short-term notes payable -- increases cash flow (source)
Amortization expense – does not affect cash flow
(However in the cash flow statement it is added to net income to determine cash provided by operations)
Decrease in accounts payable -- decreases cash flow (use)
Increase in long-term investments -- decreases cash flow (use)

2-20. Jupiter Corporation – Saturn Corporation

	Jupiter	Saturn
Gross profit.........................	$700,000	$700,000
Selling and adm. expense...	160,000	160,000
Amortization.......................	240,000	400,000
Operating profit..................	300,000	140,000
Taxes (40%)........................	120,000	56,000
Earnings after taxes.............	180,000	84,000
Plus amortization expense...	240,000	400,000
Cash Flow...........................	**$420,000**	**$484,000**

Saturn had $160,000 more in amortization, which provided $64,000 (0.40 × $160,000) more in cash flow. We observe that Saturn's taxes were less by: $120,000 ─ $56,000 = $64,000 (0.40 × $160,000).

2-21. **Loofa Corporation**

a. Statement of Cash Flows

For the Year Ended December 31, 2012

Operating activities:		
Net income (earnings after taxes)...............		$ 54,610
Add items not requiring an outlay of cash:		
Amortization.................................	8,190	8.190
Cash flow from operations		62,800
Changes in non-cash working capital:		
Decrease in accounts receivable....	5,460	
Increase in inventory.....................	(16,385)	
Increase in accounts payable.........	19,115	
Decrease in taxes payable...............	(5,455)	
Net change in non-cash working capital....		2,735
Cash provided by operating activities........		65,535
Investing activities:		
Increase in plant and equipment...........	(19,115)	
Cash used in investing activities................		(19,115)
Financing activities:		
Issue of common stock	16,385	
Common stock dividends paid.............	(27,305)	
Cash used in financing activities………...		(10,920)
Net increase in cash (equivalents) during the year..		35,500
Cash, beginning of year……….		21,845
Cash, end of year……………...		$ 57,345

b. Major accounts contributing to positive change in cash position are: net income, payables and common stock issuance. Negative change comes from inventory, plant and equipment and dividends paid.

2-22. **Waif Corporation**

a. Statement of Cash Flows

For the Year Ended December 31, 2012

Operating activities:		
Net income (earnings after taxes)...............		$ 91,000
Add items not requiring an outlay of cash:		
Amortization................................	$ 22,000	22,000
Cash flow from operations		113,000
Changes in non-cash working capital:		
Increase in accounts receivable....	(12,600)	
Decrease in inventory....................	7,100	
Decrease in accounts payable.........	(10,000)	
Net change in non-cash working capital....		(15,500)
Cash provided by operating activities........		97,500
Investing activities:		
Increase in plant and equipment...........	(48,000)	
Sale of land……………………………	27,000	
Cash used in investing activities...............		(21,000)
Financing activities:		
Retirement of bonds payable...............	(40,000)	
Issue of common stock.......................	40,000	
Common stock dividends paid………	(39,400)	

Cash used in financing activities………...		(39,400)
Net increase in cash (equivalents) during the year		37,100
Cash, beginning of year……….		17,400
Cash, end of year……………...		$ 54,500

b. Major accounts contributing to positive change in cash position are: net income, amortization, sale of land and common stock issuance. Negative change from plant and equipment, bond retirement, and dividends paid.

2-23. **Maris Corporation**

Statement of Cash Flows

For the Year Ended December 31, 2012

Operating activities:		
Net income (earnings after taxes)................		$250,000
Add items not requiring an outlay of cash:		
Amortization..............................	$ 230,000	230,000
Cash flow from operations		480,000
Increase in accounts receivable..	(10,000)	
Increase in inventory..................	(30,000)	
Decrease in prepaid expenses....	30,000	
Increase in accounts payable.....	250,000	
Decrease in accrued expenses...	(20,000)	
Net change in non-cash working capital.....		220,000
Cash provided by operating activities.........		700,000
Investing activities:		
Decrease in investments.....................	10,000	
Increase in plant and equipment.........	(600,000)	
Cash used in investing activities................		(590,000)

Financing activities:

Increase in bonds payable	60,000	
Preferred stock dividends paid...........	(10,000)	
Common stock dividends paid...........	(140,000)	
Cash used in financing activities………..		(90,000)
Net increase (decrease) in cash		20,000
Cash, at beginning of year		100,000
Cash, end of year		$120,000

2-24.

Cash flow provided by operating activities exceeds net income by $450,000. This occurs primarily because we add back amortization of $230,000 and accounts payable increases by $250,000. Thus, the reader of the cash flow statement gets important insights as to how much cash flow was developed from daily operations.

2-25.

The buildup in plant and equipment of $600,000 (gross) and $370,000 (net) has been financed, in part, by the large increase in accounts payable ($250,000). This is not a very satisfactory situation. Short-term sources of funds can always dry up, while capital asset needs are permanent in nature. The firm may wish to consider more long-term financing, such as a mortgage, to go along with profits, the increase in bonds payable, and the add-back of amortization.

2-26. $\text{Book value per share} = \dfrac{\text{Shareholders' equity - Preferred stock}}{\text{Common shares outstanding}}$

$\text{Book value} = \dfrac{(\$1{,}390{,}000 - \$90{,}000)}{} = \dfrac{\$1{,}300{,}000}{} = \mathbf{\$8.67}$

per share (2011)	150,000	150,000	

Book value per share (2012)	= ($1,490,000 - $90,000) / 150,000	= $1,400,000 / 150,000	= **$9.33**

2-27. Market value = 2.8 × $9.33 = **$26.12**

P/E ratio = $26.12/ $1.60

= 16.33 or **16x**

2-28. **Winfield Corporation**

Statement of Cash Flows

December 31, 2012

Operating activities:

Net income (earnings after taxes)...............		$ 14,000
Add items not requiring an outlay of cash:		
Amortization (buildings).....	$10,500	
Gain on sale of investment……..	(5,250)	
Loss on sale of equipment...........	1,050	
		6,300
Cash flow from operations:		20,300
Changes in non-cash working capital:		
Increase in accounts receivable...	(2,450)	
Increase in inventory...................	(5,250)	
Increase in prepaid expenses.......	(175)	
Decrease in accounts payable.....	(1,750)	
Increase in accrued expenses......	1,925	
Decrease in interest payable........	(175)	
Net change in non-cash working capital......		(7,875)
Cash provided by operating activities…......		12,425

Investing activities:		
Proceeds from the sale of stock............	8,750	
Proceeds from the sale of equipment....	2,450	
Purchase of equipment..........................	(15,750)	
Purchase of land (see note)...................	(8,750)	
Cash used in investing activities…………..		(13,300)
Financing activities:		
Increase in notes payable......................	2,625	
Increase in bonds payable.....................	5,250	
Common stock dividends paid.............	(6,650)	
Cash provided by financing activities…………..		1,225
Net increase in cash		350
Cash, beginning of year		1,400
Cash, end of year		$ 1,750

Issued note of $8,750 for land purchase (non-cash); due June 30, 2013.

2-29. **Gardner Corporation**

a. Income Statement

For the Year Ending December 31, 2012

Sales………………………………………………..	$220,000
Cost of goods sold @ 60%.................................	132,000
Gross profit…………………………………..	88,000
Selling and administration expense…………......	22,000
Amortization expense…………………………...	20,000
Operating profit………………………………	46.000
Interest expense (1)……………………………..	6,000
Earnings before taxes…………………………	40,000
Taxes @ 18%..	7,200
Earnings after taxes……………………………	$32,800

(1) Interest expense = (10% × $20,000 + 8% × $50,000) = $6,000

b. **Gardner Corporation**

Balance Sheet

December 31, 2012

Cash	$ 10,000	Accounts payable	$ 15,000
Accounts receivable	16,500	Notes payable	26,000
Inventory	27,500	Bonds payable	40,000
Prepaid expenses	12,000		
Current assets	66,000	Current liabilities	81,000
Capital assets:		Shareholders' equity:	
Plant and Equipment	285,000	Common stock	75,000
less: acc. amortization	70,000	Retained earnings	125,000
Net plant & equipment	215,000		
Total assets	$281,000	Total liabilities & equity	$281,000

Acc. Amortization = $50,000 + $20,000 = $70,000
Retained Earnings = $105,000 + $20,000 = $125,000

c. **Gardner Corporation**

Statement of Cash Flows

For the Year Ended December 31, 2012

Operating activities:		
Net income (earnings after taxes)................		$32,800
Add items not requiring an outlay of cash:		
Amortization..............................	$ 20,000	20,000
Cash flow from operations		52,800
Increase in accounts receivable..	(1,500)	
Increase in inventory..................	(2,500)	
Increase in accounts payable.....	3,000	
Increase in notes payable*…….	6,000	
Net change in non-cash working capital.....		5,000
Cash provided by operating activities.........		57,800
Investing activities:		
Increase in plant and equipment.........	(35,000)	
Cash used in investing activities................		(35,000)
Financing activities:		
Decrease in bonds payable..................	(10,000)	
Common stock dividends paid...........	(12,800)	
Cash used in financing activities………..		(22,800)
Net increase (decrease) in cash		0
Cash, at beginning of year		10,000
Cash, end of year		$10,000

* **Note**: There is a healthy debate as to whether notes payable (trade related) should be included in operating or financing activities.

d. Major accounts contributing to positive change in cash position are: net income and amortization. Negative change is from plant and equipment, bonds payable and dividends paid.

2-30. Ron's Aerobics Ltd..

a.	2011	Net income	$68,000
		Taxes @ 16.5%	11,220
		Income after taxes	**$56,780**
	2012	Net income	$142,000
		Taxes @ 13% (Text)	18,460
		Income after taxes	**$123,540**

Note: Manitoba 2012 tax rate was actually changed to 15%

b. The average tax rate is **14.75%**.

2-31. Inland Fisheries Corp.

a.	Cash flow from operating activities	$6.00	million
	- Capital expenditures	2.00	
	- Common share dividends	0.75	
	- Preferred share dividends	0.35	
	Free cash flow	**$2.90**	**million**

b. Free cash flow represents the funds that are available for special financial activities, such as the acquisition of another firm.

2-32. Nix Corporation

Income Statement

Sales..	$485,000
Cost of goods sold.......................................	<u>205,000</u>
Gross Profit..	280,000
Selling and administrative expense..............	70,000
Amortization expense..................................	<u>60,000</u>
Operating profit...	150,000
Interest expense...	<u>25,000</u>
Earnings before taxes..................................	125,000
Taxes @ 14.5% (Text)..	<u>18,125</u>
Earnings after taxes......................................	**<u>$106,875</u>**

<u>Note: The B.C. 2012 tax rate is changed to 13.5%</u>

2-33. Nix Corporation (Continued)

Tax savings on amortization = $60,000 × 14.5%
= **$8,700**

2-34. R.E. Forms Ltd.

Alberta	Net income	$75,000
	Taxes @ 14%	<u>10,500</u>
	Income after taxes	**<u>$64,500</u>**
Ontario	Net income	$75,000
	Taxes @ 16.5%	<u>12,375</u>
	Income after taxes	**<u>$62,625</u>**

<u>(2012 rate changed to 15.5%)</u>

2-35. J.B. Wands

a. Investment (bonds)	**$14,000**	
Bond interest @ 6.0% x $14,000 =		$840.00
Marginal tax rate (Saskatchewan)	35.00%	
Deduct:Combined taxes payable 35% x $840 =		294.00
After tax bond yield (return)		$546.00

After tax yield = return / investment x 100%

= $546.00/ $14,000 × 100% = **3.90%**

Investment (shares)	**$14,000**	
Share dividend @ 5.0% x $14,000 =		$700.00
Marginal tax rate (Saskatchewan)	17.5%	
Deduct:Combined taxes payable 17.5 x $700=		122.50
After tax bond yield (return)		$577.50

After tax yield = return / investment x 100%

= $577.50/ $14,000 × 100% = **4.125%**

The dividend provides a slightly better after tax yield (return).

b. Bond interest is a fixed payment. Share dividends may not be paid and shares are subject to capital gains and losses. This makes the shares riskier. The result illustrates the “risk – return tradeoff”.

2-36. Billie Fruit

A. Top bracket (Investment of $20,00)

Share dividend @ 7.0% x $20,000 =		$1,400.00
Marginal tax rate (Yukon) $1,400 x	17.23%	
Deduct: Combined taxes payable		241.22
After tax dividend yield (return)		$1,158.78

After tax yield = return / investment x 100%

= $\boxed{\text{\$1158.78/ \$20,000} \times 100\% = \textbf{5.79\%}}$

Capital gain @ 7.0% x $20,000 =		$1,400.00
Marginal tax rate (Yukon) $1,400 x	21.20%	
Deduct: Combined taxes payable		296.80
After tax bond yield (return)		$1,103.20

After tax yield = return / investment x 100%

$\boxed{\text{Better: \$1,103.20/ \$20,000} \times 100\% = \textbf{5.52\%}}$

B. Middle bracket ($35,000 to $55,280)

Share dividend @ 7.0%		$1,400.00
Marginal tax rate (Yukon)	4.4%	
Combined taxes payable (4.4 x $1,400)		61.60
After tax dividend yield (return)		$1,338.40

After tax yield

$\boxed{\text{Better: \$1,338.40/ \$20,000} \times 100\% = \textbf{6.69\%}}$

Capital gain @ 7.0%		$1,400.00
Marginal tax rate (Yukon)	15.84%	
Combined taxes payable		221.76
After tax yield (return)		$1,178.24

After tax yield

$\boxed{\text{\$1,178.24/ \$20,000} \times 100\% = \textbf{5.89\%}}$

2-37. Jasper Corporation

Yield is 7%
On each $100 investment

Interest paid to bondholder...		$7.00
Co.'s Tax savings @ 40%..	2.80	
Combined bondholder tax payable @ 39%......	- 2.73	
Net loss to government ($2.80 - $2.73)	**$0.07**	