

RATIO CALCULATIONS ©

ratios1.doc

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The ratios below should be committed to memory as you encounter them during the semester; they will be included on the midterm exams (when presented in the chapters) and all of them will be included on the final. In effect, you will be tested twice on each ratio. The number in the left column represents the exam that will include the ratio. NBIT (net income before interest and taxes) = Net income + interest expense + income taxes. An average = (beginning of year balance + end of year balance) / 2. **Remember, in the world of finance and business, some ratio formulas could be different from those shown below. The most common deviation is NOT using averages in the denominator.** You should check your comparative source before making calculations. Capital expenditures are the amounts spent during the current year to purchase long-lived assets.

ON EXAM

LIQUIDITY RATIOS

- 1 *WORKING CAPITAL:*
 current assets - current liabilities
- 1 *CURRENT RATIO:*
 current assets / current liabilities
- 3 *INVENTORY TURNOVER:*
 cost of goods sold / average inventory
- 4 *AVERAGE COLLECTION PERIOD:*
 365 / accounts receivable turnover ratio
 365 / (net sales / average net accounts receivable)

SOLVENCY RATIOS

- 1 *DEBT TO TOTAL ASSETS:*
 total liabilities / total assets
- 5 *TIMES INTEREST EARNED:*
 Nbit / interest expense
- 1 *FREE CASH FLOWS:*
 net cash inflows from operating activities - (capital expenditures + cash dividends)

PROFITABILITY RATIOS

- 1 *BASIC EARNINGS PER SHARE:*
 (net income - * preferred dividends, if any) / weighted average common shares outstanding
- 3 *GROSS PROFIT RATE:*
 gross profit / net sales
- 3 *PROFIT MARGIN:*
 net income / net sales
- 5 *RETURN ON ASSETS:*
 net income / average assets
- 5 *ASSET TURNOVER:*
 net sales / average assets
- 6 *RETURN ON COMMON STOCKHOLDERS' EQUITY:*
 (net income - * preferred stock dividends, if any) / average common stockholders' equity

* most companies do not have preferred stock, therefore, there wouldn't be any preferred stock dividends.