

All of the following financial indicators are measures of liquidity and activity except the:

CalculatorTime Value Tables

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|------|---------------------------------|
| A. | Merchandise inventory turnover. |
| B. | Accounts receivable turnover. |
| ✓ C. | Times interest earned ratio. |
| D. | Acid-test ratio. |

Explanation

Choice "C" is correct. Liquidity ratios and activity ratios are used to measure the short-term activity of an organization. Liquidity ratios seek to measure the ability of an organization to meet its obligations in the short term. Activity ratios seek to measure the utilization and efficiency of current assets held by the company.

Both inventory turnover and accounts receivable turnover are activity ratios meant to measure the utilization of each respective asset. The acid-test ratio is a more conservative liquidity ratio that seeks to measure the ability of a company to repay short-term obligations using most liquid current assets. The times interest earned ratio is associated with an analysis of the solvency of a company. While it is an important tool in financial statement analysis, it is not aimed at evaluating or measuring the liquidity of a company or utilization of assets (activity ratios).

Choice "A" is incorrect. The inventory turnover ratio is a classic example of an activity ratio. This ratio is used to measure the utilization of inventory by a company. The higher the utilization, the better.

Choice "B" is incorrect. The accounts receivable turnover ratio is a classic example of an activity ratio. This ratio is used to measure the utilization of accounts receivable by a company. The higher the utilization, the better.

Choice "D" is incorrect. The acid-test ratio is a classic example of a liquidity ratio. This ratio is used to measure the ability of an organization to meet its short-term obligations.

Which of the following transactions would increase the current ratio and decrease net profit?

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| ☐ | A. A federal income tax payment due from the previous year is paid. |
| ☐ | B. A long-term bond is retired before maturity at a discount. |
| ☐ | C. A dividend is paid. |
| ☒ | D. Vacant land is sold for less than the net book value. |

Explanation

Choice "D" is correct. The current ratio is current assets divided by current liabilities. The sale of land would increase cash and therefore current assets without increasing current liabilities. This would increase the current ratio. Furthermore, the sale of land at a loss would decrease net profit.

Choice "A" is incorrect. The payment of a tax payment would not decrease net profit because the expense was accrued last year.

Choice "B" is incorrect. The use of cash to retire a long-term bond would reduce current assets without reducing current liabilities. This would reduce the current ratio.

Choice "C" is incorrect. As above, this would reduce cash without reducing current liabilities.

All of the following are affected when **merchandise** is purchased on credit *except*:

CalculatorTime Value Tables

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| ☐ | A. Total current assets. |
| ☒ | B. Net working capital. |
| ☐ | C. Total current liabilities. |
| ☐ | D. Current ratio. |

Explanation

Choice "B" is correct. Working capital is calculated by taking the difference between current assets and current liabilities. In order to assess the impact of a transaction on working capital, the key is to think about whether either current assets or current liabilities (or both) are affected and to what extent they are affected.

Net working capital is not impacted by the purchase of inventory on credit. For this transaction, there is an increase in inventory which is a current asset, and an equivalent increase in accounts payable (a current liability). Therefore, the transaction increases both current assets and current liabilities by the same amount, leaving the calculation of working capital unchanged.

Choice "A" is incorrect. The answer choice is incorrect because the transaction involves the purchase of inventory on account. Current assets of the company have increased as a result of the acquisition of inventory.

Choice "C" is incorrect. The answer choice is incorrect because the transaction involves the purchase of inventory on account. Current liabilities of the company have increased as a result of the acquisition of inventory on credit.

Choice "D" is incorrect. The current ratio is equal to current assets divided by current liabilities. If this ratio is equal to anything other than 1 (which it most often is), the ratio will change as a result of the increase in both current assets and current liabilities.

When reviewing a credit application, the credit manager should be *most* concerned with the applicant's:

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| A. | Profit margin and return on assets. |
| B. | Price/earnings ratio and current ratio. |
| C. | Working capital and return on equity. |
| ☒ D. | Working capital and current ratio. |

Explanation

Choice "D" is correct. In evaluating whether to extend credit to a potential applicant, a review of the ability of the applicant to repay the obligation is required. In assessing this ability, the applicant's liquidity and solvency must be reviewed.

Working capital and the current ratio are both indicators of the liquidity position of an applicant. Working capital equals current assets less current liabilities. The current ratio divides current assets by current liabilities. Both ratios indicated are tools that can be utilized in the assessment of the creditworthiness of a potential individual or entity.

Choice "A" is incorrect. This answer choice incorrectly associates the creditworthiness of an applicant with the evaluation of profit margin and return on assets. Although both ratios are important, they would not be utilized in the determination of liquidity and an evaluation of the ability of an applicant to repay debts.

Choice "B" is incorrect. This answer choice incorrectly associates the creditworthiness of an applicant with the evaluation of the pricing/earnings ratio. While the current ratio would be used to determine creditworthiness, the price/earnings ratio would not be taken into consideration for this purpose. The price/earnings ratio divides the market value per share by the earnings per share; this ratio would not be utilized in the determination of liquidity and an evaluation of the ability of an applicant to repay debts.

Choice "C" is incorrect. This answer choice incorrectly associates the creditworthiness of an applicant with the evaluation of return on equity. While working capital would be used to determine creditworthiness, the return on equity would not be taken into consideration for this purpose. The return on equity measures the profitability of an organization in relation to the equity ownership of the company ($\text{net income} \div \text{shareholders' equity}$); this ratio would not be utilized in the determination of liquidity and an evaluation of the ability of an applicant to repay debts.

Douglas Company purchased 10,000 shares of its common stock at the beginning of the year for cash. This transaction will affect all the following *except* the:

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| ☐ | A. Debt-to-equity ratio. |
| ☐ | B. Earnings per share. |
| ☒ | C. Net profit margin. |
| ☐ | D. Current ratio. |

Explanation

Choice "C" is correct. When a company purchases its own common stocks, the acquired stock is referred to as treasury shares and recorded as a contra equity account on the balance sheet (statement of financial position).

The only measure not affected by the purchase of its own common stock is Douglas' net profit margin. Both the debt/equity ratio and the earnings per share are affected by the number of shares outstanding of common stock, while the current ratio is affected by the amount of cash held.

Choice "A" is incorrect. This transaction will decrease equity through treasury stocks, therefore increasing debt-to-equity ratio ($\text{Total debt} \div \text{Total equity}$).

Choice "B" is incorrect. This transaction will decrease the number of shares outstanding used in the denominator of the formula calculation, therefore increasing earnings per share $[(\text{Net income} - \text{Preferred dividends}) \div \text{Weighted average common stocks outstanding}]$.

Choice "D" is incorrect. This transaction will decrease cash after paying to purchase the stocks, therefore decreasing the current ratio ($\text{Current assets} / \text{Current liabilities}$).

In analyzing the short-term liquidity of a firm, many analysts prefer to use the quick (or acid test) ratio rather than the current ratio. The primary reason for this preference is that the:

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- ☐ A. Quick ratio excludes account receivables.
- ☐ B. Current ratio includes marketable securities, which may be mispriced.
- ☐ C. Pro forma cash flow statements focus on cash only.
- ☒ D. Conversion of inventory into cash is less reliable.

Explanation

Choice "D" is correct. The current ratio measures a company's liquidity by evaluating the relationship between current assets and current liabilities. It measures the company's ability to use its liquid assets to satisfy its current obligations. The quick (or acid test) ratio excludes slower moving current assets, such as inventory and prepaids, as these assets can be slower to convert into cash and therefore satisfy the current obligations of an entity.

Both the current ratio and the quick ratio include cash, accounts receivable, and marketable securities; therefore "A", "B", and "C" are incorrect. Choice "D" is correct, because the quick ratio does not include inventory, which is considered less liquid than the other current assets.

Choice "A" is incorrect. Quick ratio does not exclude account receivables.

Choice "B" is incorrect. Marketable securities cannot be mispriced due to its short-term (cash equivalent) nature.

Choice "C" is incorrect. Pro forma cash flow statement has nothing to do with the quick ratio.

The following data have been extracted from the financial statements of Hutton Inc.

	<u>12/31/Year 2</u>	<u>12/31/Year 1</u>
Current assets:		
Cash and cash equivalents	100,000	80,000
Marketable securities (at fair value)	110,000	140,000
Accounts receivable	700,000	600,000
Inventory (at lower of cost or market)	350,000	425,000
Total current assets	1,260,000	1,245,000
Total assets	3,710,000	3,335,000
Current liabilities:		
Accounts payable	200,000	250,000
Notes payable	400,000	375,000
Accrued and other liabilities	300,000	225,000
Total current liabilities	900,000	850,000
Long-term debt:		
Bonds and notes payable	1,200,000	1,050,000
Total liabilities	2,100,000	1,900,000

What was Hutton Inc.'s, current ratio for Years 2 and 1?

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	<u>12/31/Year 2</u>	<u>12/31/Year 1</u>
A.	1.01	0.96
B.	1.77	1.76
C. ✓	1.40	1.46
D.	4.12	3.92

Explanation

Choice "C" is correct. The current ratio is calculated as current assets divided by current liabilities, as follows:

	<u>12/31/Year 2</u>		<u>12/31/Year 1</u>	
Total current assets	\$1,260,000		\$ 1,245,000	
Total current liabilities	\$(900,000)	= 1.40	\$(850,000)	= 1.46

Choice "A" is incorrect. These answers exclude inventory in the computation of the current ratio. Although inventory is excluded in the computation of the quick ratio, it is included in the computation of the current ratio.

Choice "B" is incorrect. These answers represent total assets divided by total liabilities. The current ratio is computed by dividing only current assets by current liabilities.

Choice "D" is incorrect. These answers represent total assets divided by current liabilities. The current ratio does include current liabilities in the denominator, but the numerator includes only current assets, not total assets.

The following data have been extracted from the financial statements of Hutton Inc.

	<u>12/31/Year 2</u>	<u>12/31/Year 1</u>
Current assets:		
Cash and cash equivalents	100,000	80,000
Marketable securities (at fair value)	110,000	140,000
Accounts receivable	700,000	600,000
Inventory (at lower of cost or market)	350,000	425,000
Total current assets	1,260,000	1,245,000
Current liabilities:		
Accounts payable	200,000	250,000
Notes payable	400,000	375,000
Accrued and other liabilities	300,000	225,000
Total current liabilities	900,000	850,000

If at the end of Year 2, Hutton Inc. used \$100 of cash to buy \$100 of inventory, what would be the effect on the following ratios (relative to the ratios computed based on the balances currently shown on Hutton Inc.'s financial statements)?

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Effect on 12/31/Year 2:

Current Ratio Quick Ratio

A.	Increase	No effect
B. ✓	No effect	Decrease
C.	No effect	No effect
D.	Decrease	Decrease

Explanation

Choice "B" is correct. The current ratio is computed as current assets divided by current liabilities. Cash and inventory are both current assets. Using cash to buy inventory does not affect total current assets, nor does it affect total current liabilities. Thus, the current ratio is not affected by the use of cash to buy inventory. The quick ratio is computed as

[cash + cash equivalents + marketable securities + net receivables] divided by current liabilities. Using cash to buy inventory would reduce the numerator (because cash is included in the numerator but inventory is not) and would not affect the denominator. Since the numerator is decreasing but the denominator is not affected, the quick ratio would decrease. Thus, using \$100 of cash to buy \$100 of inventory would not affect the current ratio but would decrease the quick ratio.

Choices "A", "C", and "D" are incorrect based on the above explanation.