*4.*

*Problem 4-24*

|  |
| --- |
| You purchased 2,500 shares of the New Fund at a price of $20 per share at the beginning of the year. You paid a front-end load of 4%. The securities in which the fund invests increase in value by 11% during the year. The fund's expense ratio is 2.7%. What is your rate of return on the fund if you sell your shares at the end of the year? (Do not round intermediate calculations. Round your answer to 2 decimal places.) |

|  |  |
| --- | --- |
| Rate of return | % |

7.

*Problem 4-16*

|  |
| --- |
| Corporate Fund started the year with a net asset value of $12.90. By year-end, its NAV equaled $12.30. The fund paid year-end distributions of income and capital gains of $1.40. |

|  |  |  |
| --- | --- | --- |
| What was the rate of return to an investor in the fund? (Round your answer to 2 decimal places.) | | |
| Rate of return | % |

*8.*

*Problem 3-24*

|  |
| --- |
| On January 1, you sold short one round lot (that is, 100 shares) of Lowe's stock at $24.70 per share. On March 1, a dividend of $1.50 per share was paid. On April 1, you covered the short sale by buying the stock at a price of $20.50 per share. You paid 20 cents per share in commissions for each transaction. |

|  |  |  |  |
| --- | --- | --- | --- |
| a. | What is the proceeds from the short sale (net of commission)? | | |
| Proceeds from the short sale | | $2470.00 |
| b. | What is the dividend payment? | | |
| Dividend payment | | $150.00 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| c. | What is the total cost, including commission, if you have to cover the short sale by buying the stock at a price of $20.50 per share? | | | |
| Total cost including commission | | $ | |
| d. | What is the value of your account on April 1? | | | |
| Value of account | | $ |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 100 | 24.7 | 2470 |  |  |
| 100 | 1.5 | 150 |  |  |
| 100 | 20.5 | 2050 | 2070 |  |
|  |  | 150 | 2070 | -1920 |

9.

*10.*

*Problem 3-15*

|  |
| --- |
| Dée Trader opens a brokerage account and purchases 100 shares of Internet Dreams at $60 per share. She borrows $2,000 from her broker to help pay for the purchase. The interest rate on the loan is 10%. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| a. | What is the margin in Dée’s account when she first purchases the stock? | | | | | | |
| Margin | | $ | | |
| b-1. | If the share price falls to $50 per share by the end of the year, what is the remaining margin in her account? (Round your answer to 2 decimal places.) | | | | | | |
| Remaining margin | | | | % | | |
| b-2. | If the maintenance margin requirement is 30%, will she receive a margin call? **yes** | | | | | | |
|  |  | | | | | | |
| c. | What is the rate of return on her investment? (Negative value should be indicated by a minus sign. Round your answer to 2 decimal places.) | | | | | | |
| Rate of return | | | % | | |

*11.*

*Problem 3-19*

|  |
| --- |
| You are bearish on Telecom and decide to sell short 100 shares at the current market price of $38 per share. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| a. | How much in cash or securities must you put into your brokerage account if the broker’s initial margin requirement is 50% of the value of the short position? | | | | |
| Initial margin | | $1900.00 | |
| b. | How high can the price of the stock go before you get a margin call if the maintenance margin is 30% of the value of the short position? (Round your answer to 2 decimal places.) | | | | |
| Stock price reaches | | | $ | |

13.

*Problem 3-16*

|  |
| --- |
| Old Economy Traders opened an account to short-sell 1,000 shares of Internet Dreams at $130 per share. The initial margin requirement was 50%. (The margin account pays no interest.) A year later, the price of Internet Dreams has risen from $130 to $144.00, and the stock has paid a dividend of $22.00 per share. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| a. | What is the remaining margin in the account? | | | | | | |
| Remaining margin | | | $ | | | |
| b-1. | What is the margin on the short position? (Round your answer to 2 decimal places.) | | | | | | |
| Short margin | | | | % | |
| b-2. | If the maintenance margin requirement is 30%, will Old Economy receive a margin call? | | | | | | |
|  |  | | | | | | |
|  | Yes | | | | | | |
| c. | What is the rate of return on the investment? (Negative value should be indicated by a minus sign. Round your answer to 2 decimal places.) | | | | | | |
| Rate of return | | % | | |

*16.*

*Problem 2-23*

|  |
| --- |
| A T-bill with face value $10,000 and 97 days to maturity is selling at a bank discount ask yield of 4.4%. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a. | What is the price of the bill? (Use 360 days a year. Do not round intermediate calculations. Round your answer to 2 decimal places.) | | | |
| Price of the bill | | $ | |
| b. | What is its bond equivalent yield? (Use 365 days a year. Do not round intermediate calculations. Round your answer to 2 decimal places.) | | | |
| Bond equivalent yield | | % |

*17.*

*Problem 2-13*

|  |
| --- |
| A municipal bond carries a coupon rate of 7.50% and is trading at par. |

|  |  |  |
| --- | --- | --- |
| What would be the equivalent taxable yield of this bond to a taxpayer in a 35% tax bracket? (Round your answer to 2 decimal places.) | | |
| Equivalent taxable yield | % |

*18.*

*Problem 4-18*

|  |
| --- |
| Loaded-Up Fund charges a 12b-1 fee of 1% and maintains an expense ratio of 0.60%. Economy Fund charges a front-end load of 2%, but has no 12b-1 fee and an expense ratio of 0.40%. Assume the rate of return on both funds’ portfolios (before any fees) is 6% per year. |

|  |  |  |  |
| --- | --- | --- | --- |
| a. | How much will an investment of $100 in each fund grow to after 1 year? (Do not round intermediate calculations. Round your answers to 2 decimal places.) | | |
|  | |  |
| Loaded-Up Fund | | $ |
| Economy Fund | | $ |
|  | | |
| b. | How much will an investment of $100 in each fund grow to after 3 years? (Do not round intermediate calculations. Round your answers to 2 decimal places.) | | |
|  | |  |
| Loaded-Up Fund | | $ |
| Economy Fund | | $ |
|  | | |
| c. | How much will an investment of $100 in each fund grow to after 10 years? (Do not round intermediate calculations. Round your answers to 2 decimal places.) | | |
|  | |  |
| Loaded-Up Fund | | $ |
| Economy Fund | | $ |
|  | | |

*20.*

*Problem 3-18*

|  |
| --- |
| You are bullish on Telecom stock. The current market price is $70 per share, and you have $21,000 of your own to invest. You borrow an additional $21,000 from your broker at an interest rate of 8.8% per year and invest $42,000 in the stock. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| a. | What will be your rate of return if the price of Telecom stock goes up by 10% during the next year? (Ignore the expected dividend.) (Round your answer to 2 decimal places.) | | | | |
| Rate of return | | % | |
| b. | How far does the price of Telecom stock have to fall for you to get a margin call if the maintenance margin is 30%? Assume the price fall happens immediately. (Round your answer to 2 decimal places.) | | | | |
| Stock price falls below | | | $ | |