|  |
| --- |
| **Investments in the stock market have increased at an average compound rate of about 5% since 1905. It is now 2012.** |

|  |  |
| --- | --- |
| **a.** | If you invested $1,000 in the stock market in 1905, how much would that investment be worth today? **(Do not round intermediate calculations. Round your answer to 2 decimal places.)** |

|  |  |
| --- | --- |
| Investment | $ |

|  |  |
| --- | --- |
| **b.** | If your investment in 1905 has grown to $1 million, how much did you invest in 1905? **(Do not round intermediate calculations. Round your answer to 2 decimal places.)** |

|  |  |
| --- | --- |
| Present value | $ |

|  |
| --- |
| **If the interest rate this year is 8.4% and the interest rate next year will be 10.4%, what is the future value of $1 after 2 years? What is the present value of a payment of $1 to be received in 2 years? (Do not round intermediate calculations. Round your answers to 4 decimal places.)** |

|  |  |
| --- | --- |
|  |  |
| Future value | $ |
| Present value | $ |
|  | |

|  |
| --- |
| **In mid-2010 a pound of apples cost $1.36, while oranges cost $1.20. Ten years earlier the price of apples was only $.97 a pound and that of oranges was $.75 a pound.** |

|  |  |
| --- | --- |
| **a.** | **What was the annual compound rate of growth in the price of the two fruits? (Do not round intermediate calculations. Round your answers to 2 decimal places.)** |

|  |  |
| --- | --- |
|  | Annual |
| Compound rate growth for apples | % |
| Compound rate growth for oranges | % |
|  | |

|  |  |
| --- | --- |
| **b.** | If the same rates of growth persist in the future, what will be the price of apples in 2030? **(Do not round intermediate calculations. Round your answer to 2 decimal places.)** |

|  |  |
| --- | --- |
| Price of apples in 2030 | $ |

|  |  |
| --- | --- |
| **c.** | What about the price of oranges? **(Do not round intermediate calculations. Round your answer to 2 decimal places.)** |

|  |  |
| --- | --- |
| Price of oranges in 2030 | $ |