

### Practice Quiz 1: Interest Rates

1. A man borrows \$5,000 with a loan charging 12% interest. At the end of 4 years, how much will he owe?
2. For her 5<sup>th</sup> birthday, a girl's grandparents buy her a \$100 savings bond earning an interest rate of 5%. When the girl cashes in the bond at age 20, how much will she receive?
3. A saver invests \$10,000 in stock today, and another \$10,000 in five years. If the investment account earns an average of 8% per year for the first five years and an average of 10% per year for the following five years, how much will be in the account at the end of ten years?
4. A worker is saving for a down payment on a house. If the down payment will be \$30,000 and she can earn 6% interest on her savings, how much must she set aside today to make the down payment in 8 years?
5. A consumer borrows \$2,000 today. In two years, he must repay the lender \$2,400. What is the implied interest rate on this loan?
6. A worker is saving for a \$30,000 down payment on a house. She can earn 6% interest on her savings and sets aside \$15,000 today. How long will it take for these savings to grow enough to make the down payment?
7. A man is saving for his daughter's college education. He can earn 8% interest in his investment account and will need \$120,000 in 15 years. He plans to set aside the same amount today, in five years, and in ten years. What amount must he set aside each time to meet this commitment?
8. A consumer borrows \$500 at a 12% interest rate. How long would it take such a debt to double?