**Activity 5.7.3 Saving for a Down Payment (Part 2)**

In the last two activities you have been using the annuity formula for planned savings. The first activity involved 6 months of saving and the second activity involved up to 49 years of saving! In this last savings activity, you will look at a time frame of ten years.

**Situation:** You are starting to think about the future and how nice it might be to have your own place. Houses or condominiums are pretty expensive so you will have to take out a loan (called a mortgage) from a bank to pay for the house or condo. If you start saving early for a down payment, you can decrease the amount of your mortgage. The amount of the down payment is the difference between the selling price of the house and the amount of the mortgage.

**Part 1:** In 10 years, Gerry wants to save $20,000 for a down payment on a house or condo. He has found an online bank that offers a 1.10% annual interest rate compounded monthly. How much money should Gerry deposit at the end of each month in order to have a $20,000 down payment in 10 years?

**Part 2:** Gerry’s down payment of $20,000 is 8% of the selling price of the house he will purchase.

1. What is the selling price of the house he will purchase?
2. Assuming that Gerry makes the $20,000 down payment, how much money does he need to borrow from the bank?