Quiz 5.3: Amortized loans

Write the formula, the values of the known variables, and box the value of the sought-after variable.

1. You plan on buying equipment worth \$16,000 in 3 years. Since you firmly believe in not borrowing, you plan on making monthly payments into an account that pays 1.60% compounded monthly. How much must your payment be?

2. If you finance 100,000 of the purchase of your new home at 4.40% compounded monthly for 15 years, how much would the monthly payment be?

3. If you can afford a monthly payment of \$650 for 20 years and if the available interest rate is 4.75%, what is the maximum amount that you can afford to borrow?

4. You plan on taking a 1 year hiatus to relax on \$10/day. If you plan on making monthly withdrawals of \$310 from a money market account that pays 1.35% compounded monthly to finance your inactivity, how much must you invest at the outset to be able to afford this?