1. My credit card charges 0.0525% per day compounded daily on the outstanding balance. What is the nominal annual interest rate for this credit card? What is the effective annual interest rate? *Assume 360 days in a year.*

2. My credit card charges 0.0525% per day compounded daily on the outstanding balance. What is the nominal monthly interest rate for this credit card? What is the effective monthly interest rate? *Assume 30 days in a month.*

3. Let’s say I purchase a $1700 curved-screen OLED TV and charge it to the credit card in the previous problem. If there is no grace period on new purchases (i.e., interest accumulates from Day 1), what will my credit card balance be one month (30 days) from now?

4. You are considering investing $10,000 in a 5-year certificate of deposit (CD). The bank is offering an interest rate of 5.2% per year (APR) with interest compounded weekly. How much will your CD be worth when it matures in 5 years? *Assume 52 weeks in a year.*

5. Another bank is offering a 5-year CD with an interest rate of 5.4% per year (APR) with interest compounded quarterly. Should you go with the new offer, instead?