Homework #4

Due: 3/5/2019 5:45pm

Reading

Read section 7.7

Problem

Your are the finance manager for a company that just had a great year. Last year's income statement and this year's expectations indicate that the company has a surplus of cash. You decide to invest $100,000 of this cash in a 5 year CD that compounds monthly. The total amount of the investment after the 5 years is given by:

$$A(r) = 100000 \left(1 + \frac{r}{12}\right)^{60}$$

where r is the annual interest rate. Assuming that the interest rate is 3% ($r = 0.03$):

1. What is the total amount of the investment after 5 years?

2. How fast is the amount growing with respect to r, in dollars per percent?