STUDENT NAME _____ **CLASS PERIOD** _____ **DATE** _____

Unit 3-5: Compound Interest Formula Quiz

Answer the following questions on this paper. Show your work as the work will also be a part of the grade.

1. John opens a savings account with $500 which he earned during the summer mowing lawn. The bank will pay him 2.5% interest for one year, compounded quarterly. Without John adding any more money to his savings account, how much money will he have at the end of one year?

2. Joan makes a deposit in a savings account of $1,235. The account earns interest at the rate of 2.25, compounded monthly. What is her ending balance after 3 years? Round to the nearest cent.

3. Richard has been given a $1,000, 1-Year Certificate of Deposit at 3.25 interest compounded weekly. What is Richard's annual percentage yield (APY) to the nearest hundredth of a percent?

Formulas:

Simple Interest Formula $I = prt$

Compound Interest Formula $B = P\left(1 + \frac{r}{n}\right)^{nt}$

APY Formula $APY = \left(1 + \frac{r}{n}\right)^{n} - 1$