For full credit, show all your work and explain your answers.

Equations:

Compound Interest:
$$F = P(1 + \frac{r}{n})^{nt}$$

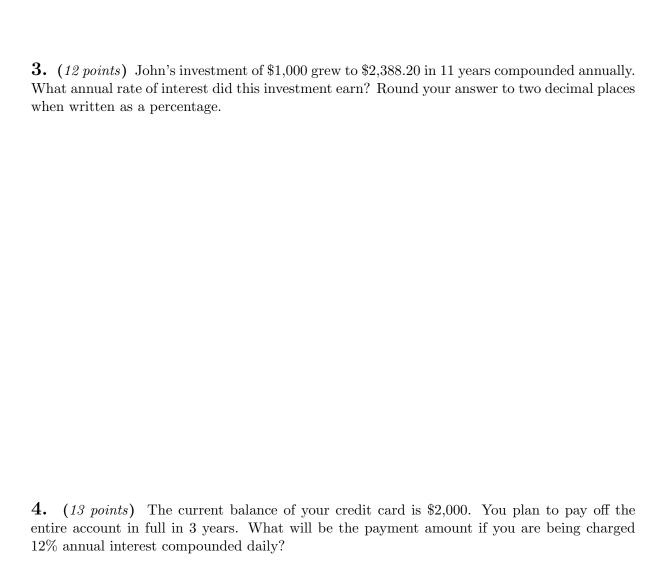
$$F = P + Prt$$

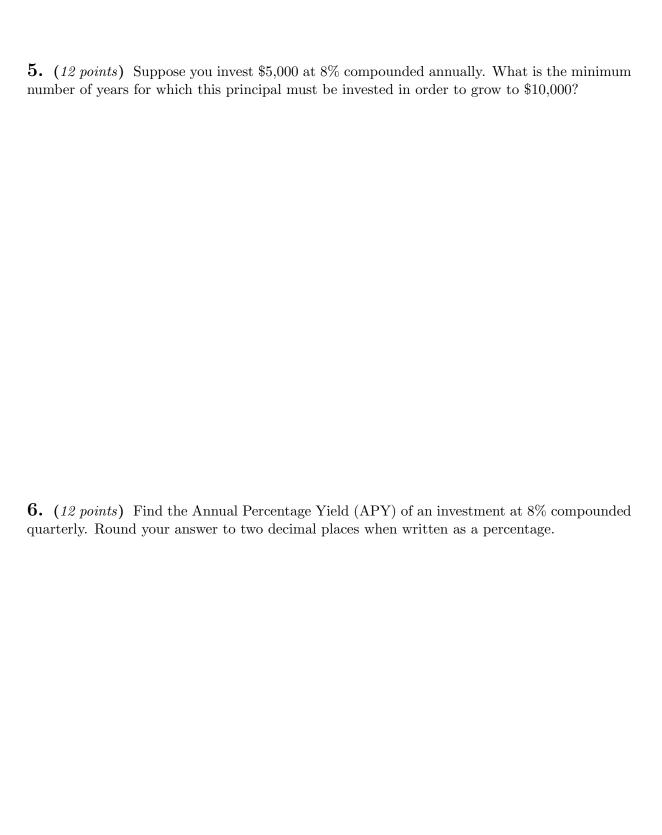
APY:

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

1. (12 points) The current price of a new Toyota RAV4 is \$24,300. What was the price of the same car 4 years earlier if the price was increasing by 3.6% annually?

2. (12 points) A student took a \$2,000 loan with 10% annual simple interest. What was the term of the loan (in months) if she had to repay \$2,150?





$7. (12\;points)$ In a certain year Blockbuster Video customers rented 880 million videos out of
the 3.7 billion videos rented that year. What percent of the videos did Blockbuster customers
rent? Round your answer to the nearest hundredth of a percent.

- $\bf 8.~$ (15 points) In 1980 the Federal Deficit was \$0.9 trillion dollars. In 2000 it was \$5.67 trillion dollars.
- A) What percent of the 1980 deficit was the 2000 deficit? Round to the nearest hundreth.
- B) How much did the deficit change from 1980 to 2000? What percent change does this represent?