## Math 107: Quiz 5

Name: $\qquad$

## Relevant formula:

$$
P=\frac{p}{i}\left(1-\frac{1}{(1+i)^{n}}\right)
$$

1) In order to buy a new Nissan Versa car, you decide to borrow $\$ 10,000$ from a bank. Suppose that the APR is $6 \%$ and that you have to pay an equal amount every month for 5 years. Find the monthly payment.
2) After graduation, you have to repay $\$ 16,000$ student loan. The interest rate (APR) is $5.4 \%$. Suppose that you can afford to make a payment of $\$ 200$ a month. Can you pay off your student loan in 8 years? Support your answer with calculations.
