$\qquad$
Score $\qquad$

Show all work to receive full credit. Supply explanations when necessary.

1. (3 points) We deposit regular semiannual payments into an account earning $7.75 \%$ compounded semiannually. What must our regular payments be if we would like to have $\$ 50,000$ in 15 years?
2. ( 5 points) For 20 years, $\$ 300$ per month is deposited into a regular annuity earning $4.5 \%$ compounded monthly.
(a) What is the future value of the account?
(b) How much of the future value is from interest?
3. (2 points) Jon made monthly payments of $\$ 51.50$ for 3 years to pay off a $\$ 1699$ loan. How much interest did he pay?
