## Loans and Loan Payments In-Class Exercise

1. Jack borrowed $\$ 15,000$ to purchase a used tractor. The loan is for 4 years at $6 \%$ APR.
a. Estimate how much interest Jack will owe in the first year.
b. Calculate the annual loan payment for this tractor loan.
c. Calculate how much principal Jack will be repaying in the $1^{\text {st }}$ loan payment.
2. Emily borrowed $\$ 150,000$ to buy a house. The mortgage is for 30 years at $7 \%$ APR. Calculate the monthly payment on Emily's mortgage.
3. Dustin wants to start his veterinary practice. He will need to borrow $\$ 300,000$ to get the necessary equipment and facilities. He will make a down payment of \$50,000 and borrow the remaining amount at 6\% for 20 years.
a. Calculate the amount of the loan Dustin will be borrowing.
b. Calculate the monthly loan payment on Dustin's loan.
