1. Halle deposited $\$ 4000$ into an account that earns $5 \%$ interest each year. In how many years will her account exceed $\$ 10,000$ ?
2. Colleen's station wagon is depreciating at a rate of $9 \%$ per year. She paid $\$ 24,500$ for it in 2002. What was her car worth in 2008 to the nearest hundred dollars? What is her car worth today?
3. Kyle estimates that his business is growing at a rate of 5\% per year. His profits in 2005 were $\$ 67,000$. Estimate his profits for 2010 to the nearest hundred dollars. What are his approximate profits today?
4. A parcel of land Jason bought in 2000 for $\$ 100,000$ is appreciating in value at a rate of about $4 \%$ each year. What is the value of the land today? What will the value of the land be 10 years from now?
5. A cup of coffee contains 100 mg of caffeine which leaves the body at a constant rate of $20 \%$ per hour. After a person drinks a cup of coffee, in how many hours will there be less than 5 mg of caffeine in his system?
