

6. A person has saved \$200,000 in a college fund for his child. The fund earns 10% APR. He plans to withdraw a fixed amount each half-year for the next 4 years (8 withdrawals), while the remainder continues to earn interest. How much can he withdraw each half-year?
7. In the previous exercise, suppose the person saved up only \$150,000 and that he earns 6% APR. How much can he withdraw each half-year?
8. A person has saved \$1,000,000 in a retirement account that earns 8% APR. The person expects to live another 25 years. How much can the person withdraw from the account each year if the fund is to last 25 years?
9. A person plans to retire on \$6,000 a month for 20 years. How much must he have saved up when he begins retirement if he is earning a 9% return on his investments?
10. A 20-year-old man hopes to live on \$5,000 a month through his expected 20 years of retirement. He expects to retire at age 70, so he will begin investing monthly now and invest for 50 years, earning an average of 9% APR. How much should he invest monthly now in order to be able to withdraw \$5,000 monthly for 20 years, beginning 50 years from now?