1) Suppose you are committed to owning a $\$ 175,000$ Ferrari. If you believe your mutual fund can achieve an annual return of $11.2 \%$ and you want to buy the car in 10 years how much do you invest today?
2) You've just made your first $\$ 5000$ contribution to your individual retirement account. Assuming you earn an annual rate of return of $10.2 \%$ and make no additional contributions what will your account be worse when you retire in 45 years? What if you wait ten years before contributing (does this suggest an investment strategy?)
3) You are scheduled to receive $\$ 10,000$ in two years when you receive it you will invest it for six more years at $7.5 \%$ per year. How much will you have in eight years?
4) You have $\$ 5,800$ to deposit. Regency bank offers $12 \%$ per year compounded monthly (1\% per month), while King bank offers $12 \%$ but will only compound annually. How much will you be your investment be worth in 20 years at each bank?
5) You have $\$ 20,000$ you want to invest for the next 40 years you offered an investment plan that will pay you $6 \%$ per year for the next 20 years and $10 \%$ per year for the last 20 years. How much will you have at the end of 40 years? Does it matter if the investment plan pays you $10 \%$ per year for the first 20 years and 6\% per year for the next 20 years? Why or why not?
