Use the future value formula to solve the following interest problems.

1. Shonda invests $\$ 4,000$ in an account that pays $5 \%$ annual interest, compounded semiannually. What is her balance to the nearest cent, at the end of 10 years?
b) After 20 years?
2. Karen deposited $\$ 1,675$ in an account that pays $1.25 \%$ interest. How much will she have after 15 years?
b) After 30 years?
3. On Peyton's $10^{\text {th }}$ birthday, his father invested $\$ 2,000$ in an account with $4.75 \%$ interest, compounded quarterly. How much will Peyton when he turns 18?
b) How much would he have if he left it in the same account until he turned 25 ?
4) Tanner deposits his graduation money (at the age of 18), $\$ 2,315$ into the Park Street Money market deposit account. It earns $4.12 \%$ interest compounding annually. How much will Tanner have when he retires at the age of 65 ?
5) Kevin deposits $\$ 7,300$ at $1.5 \%$ interest in an account that compounds quarterly. How much will he have after 5 year?
b) After 10 years?
C) After 15 years?
6) Joanne deposits $\$ 4,300$ into a one-year CD at a rate of $4.3 \%$ compounded monthly. What is her ending balance after this time period?
b) How much interest does she earn?
7) Mike deposits $\$ 5,000$ in a three-year CD account that yields $3.5 \%$ interest compounded quarterly. What is his ending balance at the end of three years?
