INART 50 Science of Music

Compound Interest

(Please see the page Exponential Growth/Compound Interest in the Coursepack for instructions on solving these problems)

What is the total amount in a bank account, given this initial deposit, compound interest rate, and time period?

Show work on all problems.

1) $1,000; 4% compounded annually; 10 years
2) $1,000; 4% compounded semi-annually; 10 years
3) $1,000; 4% compounded quarterly; 10 years
4) $2,500; 5% compounded semi-annually; 5 years
5) $3,500; 3.5% compounded annually; 12 years
6) $5,000; 2.25% compounded quarterly; 10 years
7) $3,750; 6% compounded annually; 7 years
8) $3,750; 3% compounded semi-annually; 7 years
9) $4,500; 3.3% compounded quarterly; 9 years
10) $4,500; 3.3% compounded semi-annually; 9 years