1. (4) What is the balance at the end of 5 years if $1400 is invested in an account which pays 4.8% and compounds interest quarterly?

2. (4) Suppose $1100 is deposited in an account which pays 2.5% interest, compounded continuously. How much interest is earned on the account in 8 years?
3. (4) Solve the equation $e^{5x+6} = 8e^{3x}$. Give both the exact solution, and an approximation to the nearest 0.001.
4. (4) $3600 is invested in an account which compounds interest semiannually. What interest rate (to the nearest 0.01%) is needed so that the balance in the account at the end of 3 years is $4000?

5. (4) Emily wants to take a vacation in 2 years, which she expects to cost her $5,000. How much money must Emily invest now, in an account which pays 4.2% interest compounded monthly, so that she can afford the vacation?