Exercise 7H

1 Shunsuki invests 3000 JPY at 6.5% interest compounded annually for 15 years.
   a Calculate the amount of money that Shunsuki has after 15 years.
   b Find how long it would take for his money to double.

2 Andrew, Billy and Colin each have 2000 euros to invest.
   Andrew invests his 2000 euros in a bank that offers 4.5% interest compounded annually.
   Billy invests his 2000 euros in a bank that offers an interest rate of 4.4% p.a. compounded half-yearly.
   Colin invests his 2000 euros in a bank that offers an interest rate of 4.3% p.a. compounded quarterly.
   a Calculate how much each of the men has in their accounts after 10 years.
   b Find how many years it would take for Andrew to have 3000 euros.
   c Find how many years it would take for Colin to double his money.

3 Brenda invests $5000 into an account that offers 3.4% interest compounded annually.
   a Calculate the amount of money that Brenda has in the account after 6 years.

   Luke also invested $5000 into an account that offered r % interest compounded annually. After 6 years he had $6250 in his account.
   b Calculate r.

4 Hussein invests 20 000 Egyptian pounds (EGP) in a bank that offers a rate of 3.1% p.a. compounded monthly.
   a Calculate the amount of money that Hussein has in the bank after 5 years.
   b Find how many years that it will take for his money to double.

5 Minura invests 50 000 SGD (Singapore dollars) in an account that pays 7% interest per year, compounded yearly.
   a Calculate how much she will have in her account after 3 years.

   The bank then changes the rate to 6.8% p.a. compounded monthly.
   b Calculate how much she will have in the account after another 3 years.

6 Mr Lin deposits 10 000 CNY (Chinese yuan) with Bank A that offers 8% interest p.a. compounded half-yearly.
   Mr Lee deposits 10 000 CNY with Bank B that offers 8.2% interest p.a. compounded yearly.
   Calculate who has earned the most interest after 2 years.