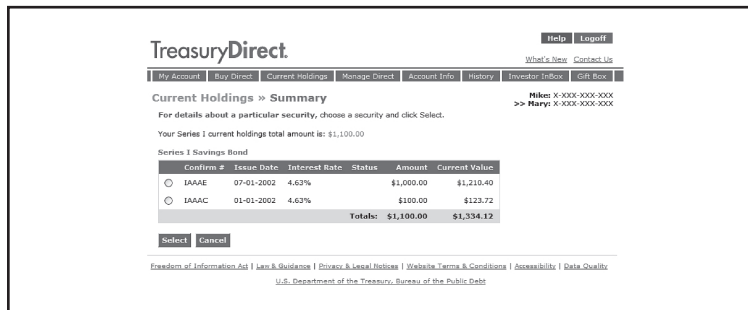


Mary Andrews received a \$100 I bond for her birthday. Her uncle bought the electronic savings bond at the government's TreasuryDirect.gov website. He sent it to a special account that Mary's parents set up for her.

Her uncle explained that the fixed interest rate on the bond is 2.0%. Inflation was recently measured at an annual rate of 2.6%, and economists

predict that it will stay the same for the rest of the year. Interest is paid every month, but earnings are compounded semi-annually. With her parents' help, Mary can check her I Bond every six months to see how much interest she has earned on her bond.



Mary is very confused by all this jargon. All she wants to know is what the bond will be worth on her next birthday. Using

what you have learned about semi-annual compounding and I Bonds, help Mary determine the value of her bond at the end of one year.

Answer the following questions on the back of this handout.

1. What is the combined interest rate?
2. Use the combined interest rate to estimate how much interest Mary would earn that year.
3. For the first half of the year, how much interest will Mary earn from the fixed interest rate?
4. For the first half of the year, how much interest will Mary earn from the inflation rate?
5. How much will her bond be worth after six months?
6. For the last half of the year, how much interest will she earn from the fixed interest rate?
7. For the last half of the year, how much interest will Mary earn from the inflation rate?
8. How much will her bond be worth after the second six months?
9. How much interest will Mary's bond earn for the year?
10. Why does the interest earned exceed the amount you estimated in #2?