

UNIT 7 HANDOUT 3

1.) A savings account offers a 4% interest rate compounded quarterly. What is the effective rate?

2.) Joe deposits \$1000 into some stock that turned out to pay 12% compounded monthly. What is the effective interest rate?

3.) Jack invests \$30,000 into an account that pays 10%. The account compounds semiannually. What is the effective interest rate?

Review:

4. If \$500 is invested into a savings account paying 6% annual interest, and the account is compounded semiannually, calculate the amount in the account after 1.5 years. Do this without the charts and show the amount in the account after each period.

5. Do #4 with the chart.

6. How much is needed to put into an account that pays 6% compounded quarterly in order to have \$10,000 ten years from now?

Solutions:

- 1.) 4.06%
- 2.) 12.68%
- 3.) 10.25%

- 4.)

time	amount
6mos.	\$515
1 yr.	\$530.45
1.5 yrs.	\$546.36

- 5.) rate used: 3%, # of periods: 3, factor: 1.0927  
 $\$500(1.0927) = \$546.35$

- 6.) rate used 1.5%, periods: 40, factor .5513  
\$5513