

Consider an investment scenario that returns a level stream of four annual payments of \$10,000 each (i.e., an annuity). The first payment occurs at the end of the first year, and the subsequent payments occur at the end of each of the next three years. The discount rate is assumed to be 6% annually.

- (a) Calculate the present value of the investment as of the beginning of the first period. Use the approach illustrated in the text to demonstrate the intrinsic calculations, and then verify your answer by reference to the appropriate present value table. If you have a "business" calculator, additionally verify your calculations using the present value functions included with your calculator.
- (b) Show how your answer to part (a) would differ if you change the assumption to "beginning of year" payments.
- (c) Using the present value tables, calculate how your answer to part (a) would differ if you change the assumption to eight semiannual (end of period) \$5,000 payments, with the 6% annual rate being revised to 3% for each semiannual period.