

**Equations of Value Worksheet****Chapter 1: The measurement of interest****Chapter 2: Solution of problems in interest**

1. What is the present value of \$5000 due in ten years assuming money grows according to compound interest and the effective annual rate of interest is 4% for the first three years, 5% for the next two years, and 5.5% for the final five years?
2. A payment of  $\$X$  two years from now along with a payment of  $\$2X$  four years from now repays a debt of \$6000 at 6.5% annual effective compound interest. Find  $X$ .
3. You have two options to repay a loan, You can repay \$6000 now and \$5940 in one year, or you can repay \$12,000 in six months. Find the annual effective interest rate(s)  $i$  at which both options have the same present value.