

Math 111 Worksheet #11
November 6, 2007

Present Value of an Ordinary Annuity: $P = R \left[\frac{1 - \left(1 + \frac{r}{k}\right)^{-kt}}{\frac{r}{k}} \right]$

P = Present Value (value at $t = 0$)

R = Recurring Payment

r = annual rate (in decimal form)

k = # compounds each year

t = # years

1. What is the present value of an ordinary annuity of \$2,000 every 6 months for 15 years at 9% compounded semiannually?
2. You buy a new car at \$24,000 with a 5 year car loan. How much would you have to pay each month if the loan has 6.6% interest compounded monthly?