## Assignment 1

## Question2

Use the formula: Effective Rate = ( 1 + Nominal Rate/t )$^{t}$ - 1

a) t = 1, Effective Interest Rate = ( 1 + 10% ) – 1 = 10.00%

b) t = 2, Effective Interest Rate = ( 1 + 10% / 2 )$^{2}$ – 1 = 10.25%

c) t = 365, Effective Interest Rate = ( 1 + 10% / 365 )$^{365}$ – 1 = 10.52%

## Question5

Use the formula: Bond Price = $Principal \times C/t \times \sum_{i=1}^{n\times t} \frac{1}{(1+R/t)^{i}} + \frac{Principal}{(1+R/t)^{n\times t}}$

a) Principal = 100, C = 7.5%, t = 2, n = 2, R = 5.90%

∴ bond price = $100 \times 7.5\%/2 \times \sum_{i=1}^{4} \frac{1}{(1+5.9\%/2)^{i}} + \frac{100}{(1+5.9\%/2)^{4}} = \$102.98$