1. Find the present value under continuous compounding of the discrete cash flow $F_n = A$, $n = h; h + 1; \ldots; h + k$ if the nominal interest rate per period is $r$. Compute the present value for $A = 25,000; h = 18; k = 4$, and $r = 8\%$.

2. Find the present value under continuous compounding of the discrete cash flow $F_n = Ae^{g(n-h)}$, $n = h; h + 1; \ldots; h + k$ if the nominal interest rate per period is $r \neq g$ if $r = g$. Compute the present value for $A = 25,000; h = 18; k = 4$, and $r = 8\%$, and $g = 6\%$.

3. Find the present value under continuous compounding of the continuous cash flow $F_t = Ae^{g(t-t_0)}$ over $t \in [t_0; t_1]$ if the nominal interest rate per period is $r \neq g$. If $r \neq g$, compute the present value for $A = 25,000; h = 18; k = 4$, and $r = 8\%$, and $g = 6\%$.

4. What is the average inflation over two years if $f_1 = 10\%; f_2 = -10\%$?

5. The inflation over four consecutive quarters is $f_1 = 1\%; f_2 = 0.5\%; f_3 = 0.5\%; f_4 = 1\%$. What is the inflation for the entire year?

6. What is the effective real interest rate per year if the nominal monthly interest rate is $r = 1\%$ and the monthly inflation rate is $f = 0.5\%$?