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 \( A = 25,000, h = 18, k = 4 \), \( r = 8\% \), 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 \( r = g \)? Compute the present value for \( A = 25,000, t_0 = 18, \) and \( t_1 = 22, r = 8\% \), 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 \( f = 0.5\% \)?