1. (1 pt) Determine whether the sequences are increasing, decreasing, or not monotonic. If increasing, enter 1 as your answer. If decreasing, enter -1 as your answer. If not monotonic, enter 0 as your answer.

   1. \( a_n = \frac{n-4}{n+3} \)
   2. \( a_n = \sqrt[n]{3n+4} \)
   3. \( a_n = \frac{2^n}{n^3} \)

2. (1 pt) Let \( f(x) = \frac{x}{x^2 + 9x + 13} \)

   A. Find the smallest real number \( r \) such that \( f(x) \) is decreasing for all \( x \) greater than \( r \).
   
   \( r = \) 

   B. Find the smallest integer \( s \) such that \( f(n) \) is decreasing for all integers \( n \) greater than or equal to \( s \).
   
   \( s = \) 

4. \( a_n = \frac{1}{3^n-9} \)