1. Code for this problem is in folder named "1_Pell".
   Since the Binet-type formula employs floating point arithmetic and there are accuracy issues that increase as we proceed to higher terms of the series, a direct implementation of the Binet-type formula test fails for bigger values of p_n.
   In order to compare the formula's result to the appropriate member of the vector of Pell numbers, I used the function "round" to round the result of the formula to the nearest integer value.
2. Code for this problem is in folder named "2_tanh".
3. Code for this problem is in folder named "3_tanh_cont_frac".
4. Code for this problem is in folder named "4_Polynomial".

   The binomial expansion for $(x-1)^7$ is:
   $x^7 - 7x^6 + 21x^5 - 35x^4 + 35x^3 - 21x^2 + 7x - 1$

   The extended polynomial and the original polynomial are quite similar to one another while x is near to 1, but as x travels away from 1, they begin to diverge. This is because a lot of high-order terms, such x^6 and x^5, which become relevant when x deviates from 1, are included in the enlarged polynomial.