

Follow the same guidelines as in Homework 4 for this assignment.

1) (6 pts) Write a single script that will compute the sums below

a) $\sum_{k=1}^{10} k^2 + k - 1.$

b) $\sum_{k=10}^1 k^2 + k - 1.$ Your answer should agree with the one given by a symbolic manipulator like the Wolfram Alpha website.

c) $\sum_{k=n}^{n^2} 2k - 2.$ Use an input value of $n = 7.$

2) (4 pts) The sum of the first $n + 1$ terms of the geometric series with common ratio r is given by

$$1 + r + r^2 + \dots + r^n = \sum_{i=0}^n r^i.$$

Write a script that will ask the user to input r and n and computes this sum. Test your program for $r = 0.55$ and $n = 12.$