May 30, 2019

## CK0030: Partial evaluation II (bis)

## Exercise 01.

Let  $x=\pi/2$ , write Python code that computes the following expression, for N=16 and M=16

$$\pi/2 - \sum_{n=0}^{N} \left\{ \frac{(2n)!}{4^n(n!)^2(2n+1)} \left[ \prod_{m=1}^{M} 1 - \frac{x^2}{\pi^2(m-1/2)^2} \right]^{2n+1} \right\}.$$

Comment and explain your solution/code.