import math

x=[2.4,2.6,2.8,3.0,3.2,3.4,3.6,3.8,4.0,4.2,4.4,4.6]

y=[3.526,3.782,3.945,4.043,4.104,4.155,4.222,4.331,4.507,4.775,5.159,5.683]

h = x[1] - x[0]

def smth(y,j):

mas=[]

for i in range(len(y)):

mas.append(y[i] - y[i-1])

mas.pop(0)

if j == 1:

return mas

else:

j-=1

return smth(mas, j)

yx1=1/h\*smth(y, 1) [1]-smth(y, 2) [1]/2+smth(y, 3) [1]/3-smth(y, 4) [1]/4

yx2=1/h\*\*2\*smth(y, 2) [1]-smth(y, 3) [1]+11/12\*smth(y, 4) [1]

print (yx1)

print (yx2)



