

## - Tema 1 MN -

### **Task 2**

#### **2.1.**

Am descompus matricea  $A$  cu SVD si stim ca  $S$  are valorile singulare pe diagonala, deci am dat plot de acel vector construit din valorile de pe diagonala.

#### **2.2.**

Am implementat formula data in enunt.

#### **2.3.**

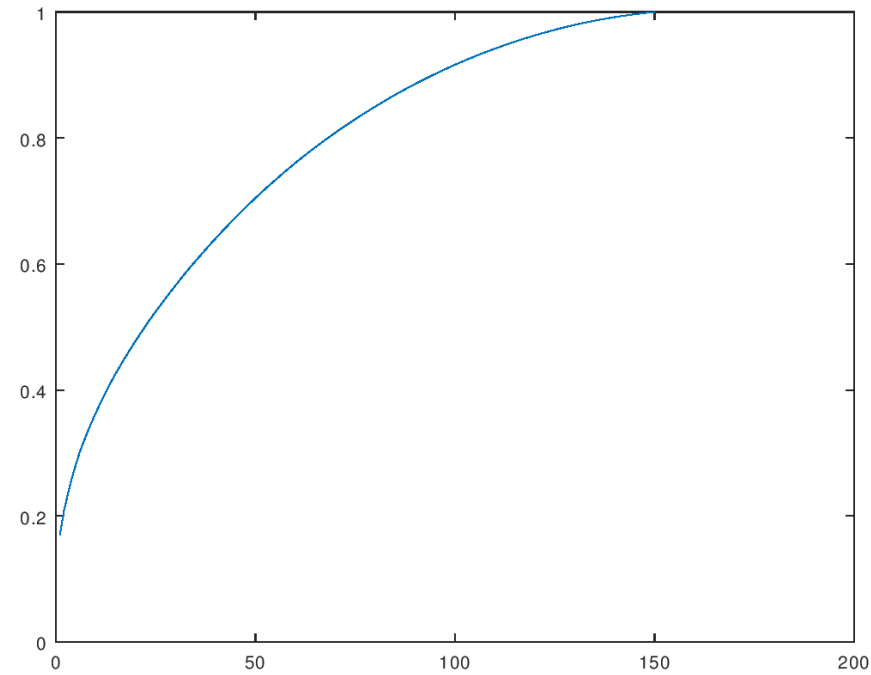
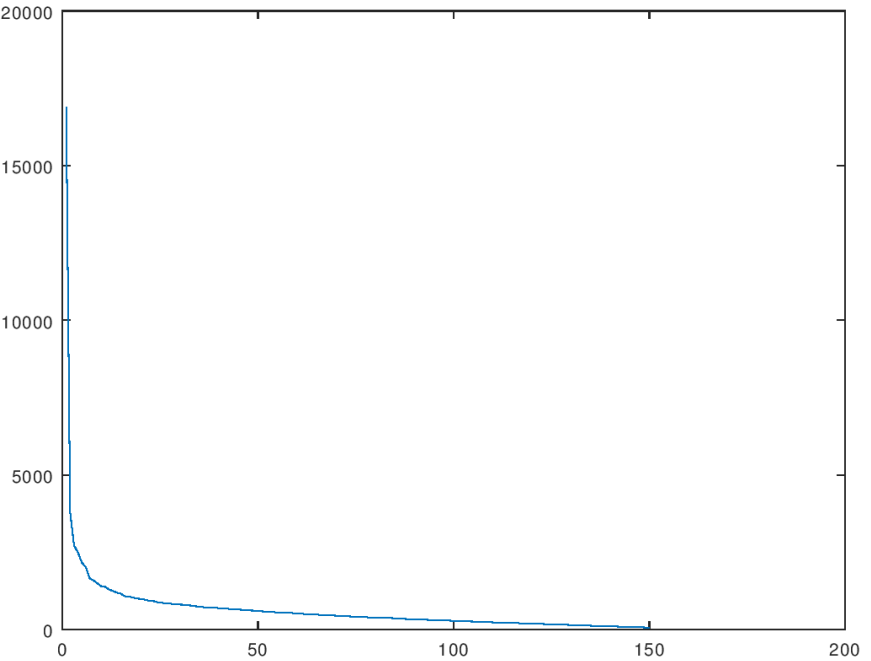
Am creat un vector al erorilor implementand formula data in enunt.

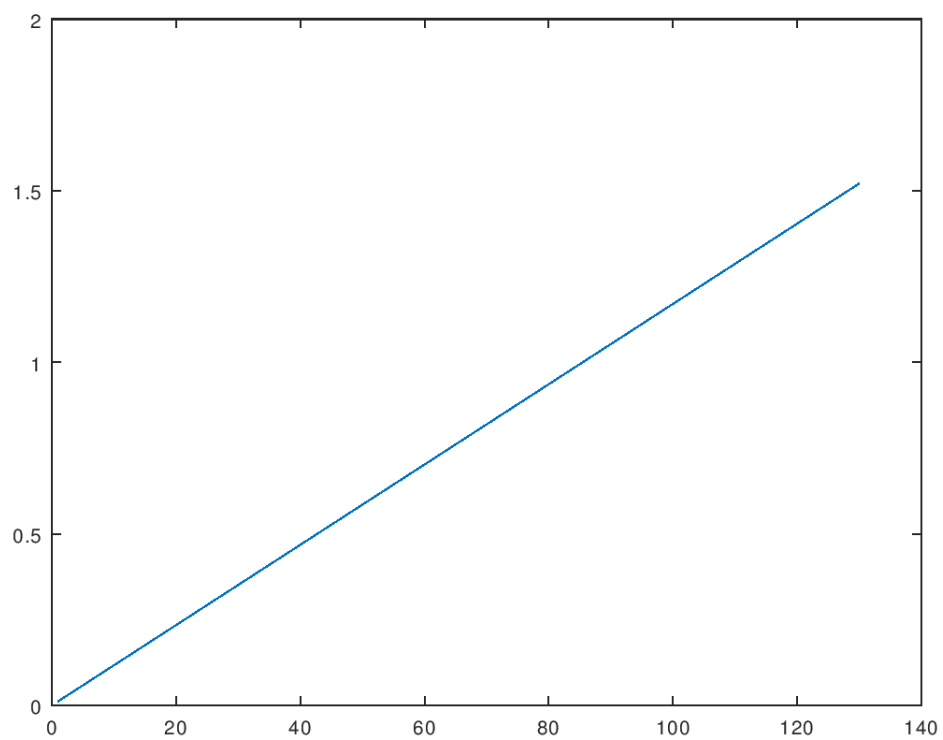
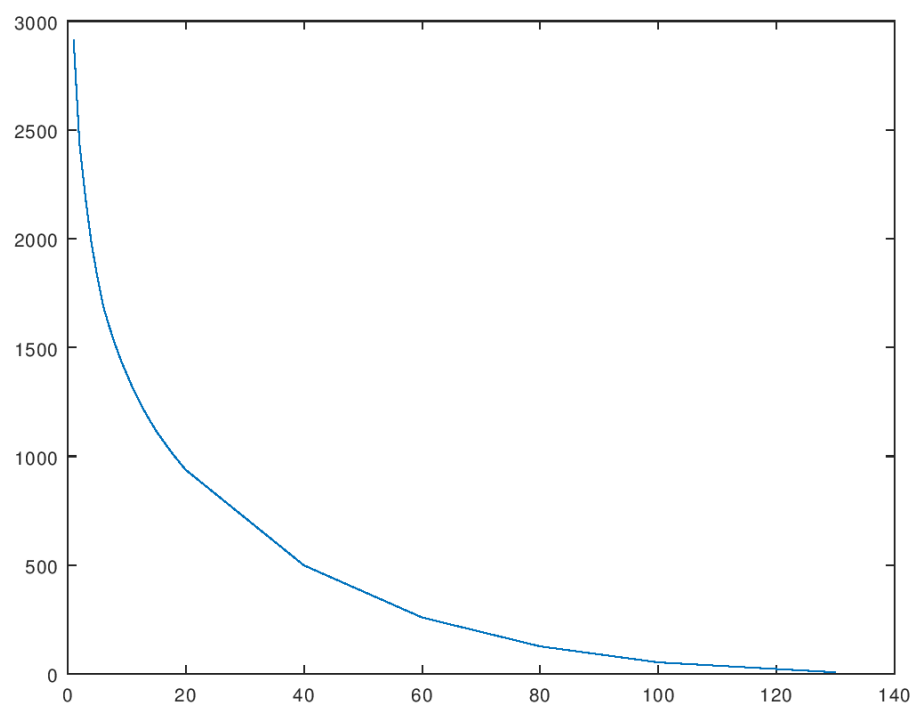
#### **2.4.**

Plot de formula data in enunt.

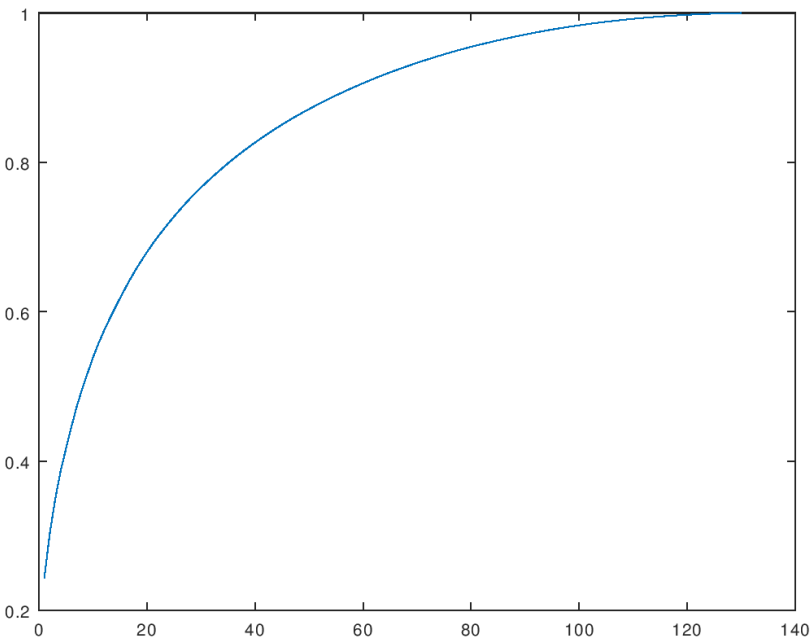
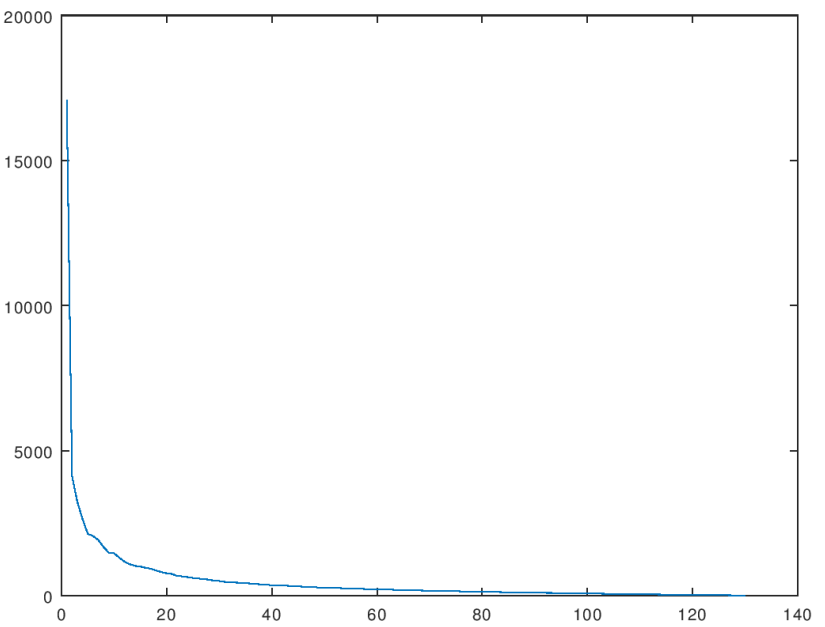
( Am folosit  $k$ -uri diferite la task-uri pentru a observa ca nu este vreo diferenta in alegera sa )

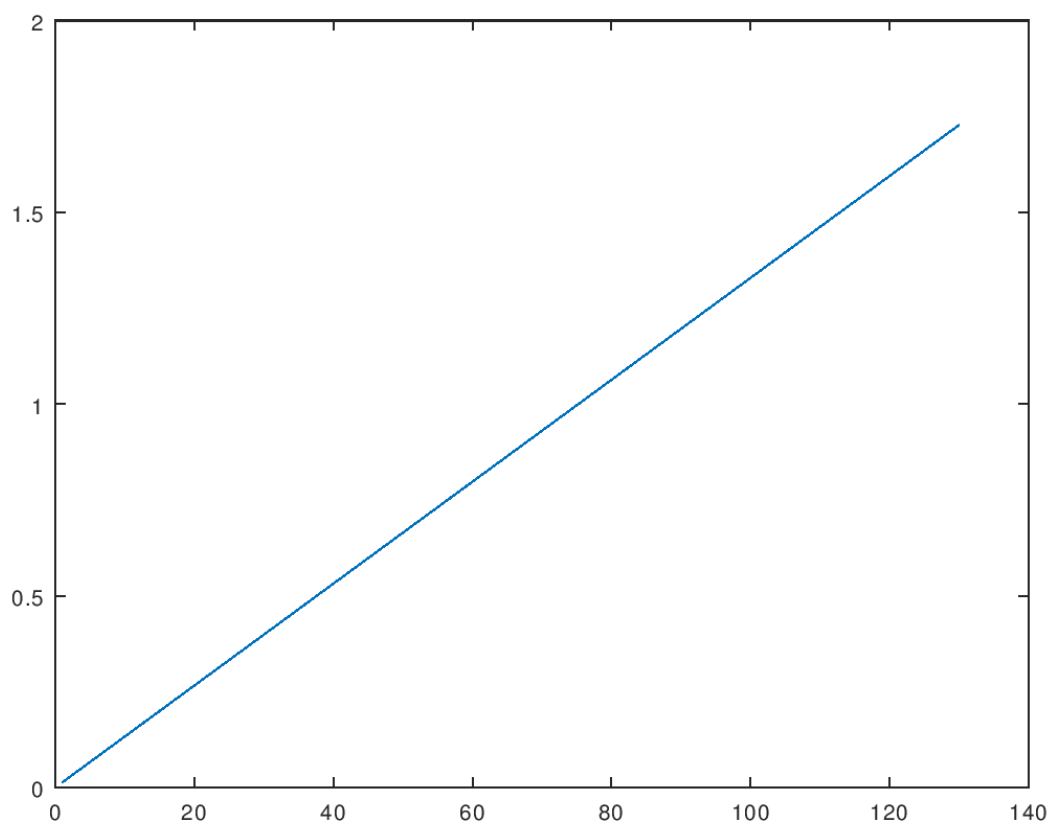
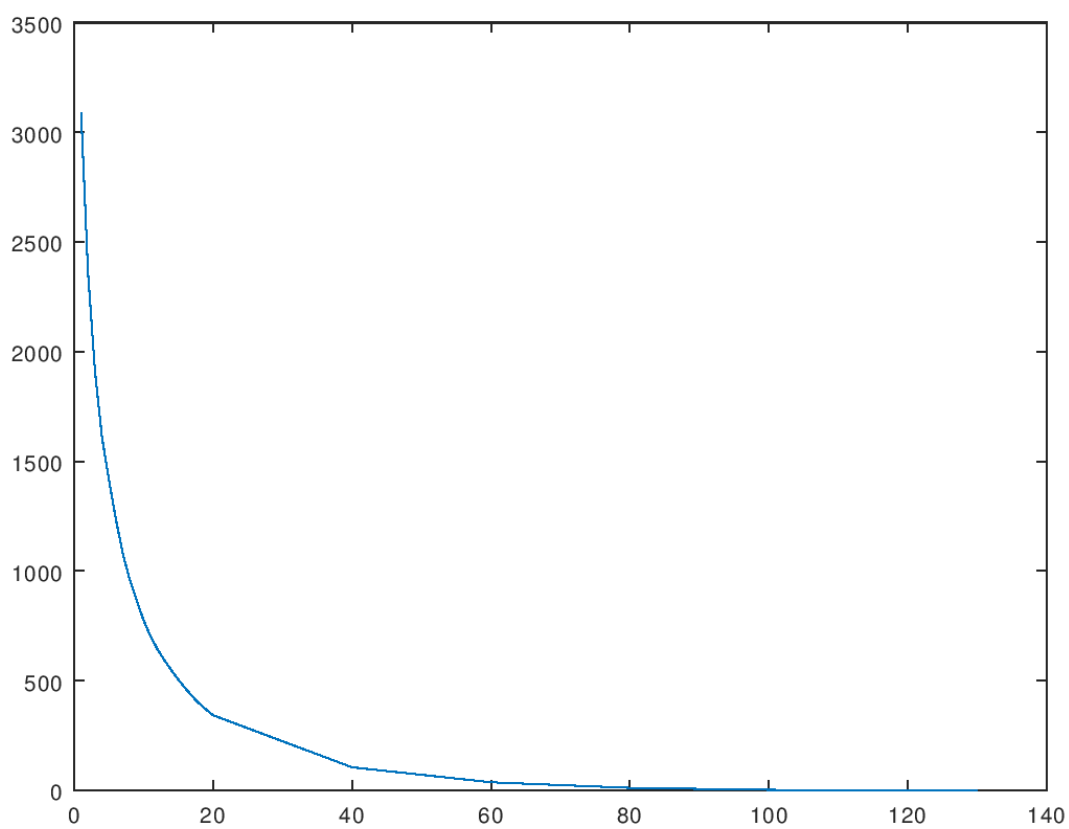
Pentru imaginea 2 ( image2.gif )





Pentru imaginea 3 ( image3.gif )





## Task 5

### 5.1.

Am descompus matricea  $A$  cu ajutorul taskului 3 in  $A_k$  si  $S$ , si dam plot de valorile de pe diagonala matricei  $S$ .

### 5.2.

Am implementat formula data in enunt.

### 5.3.

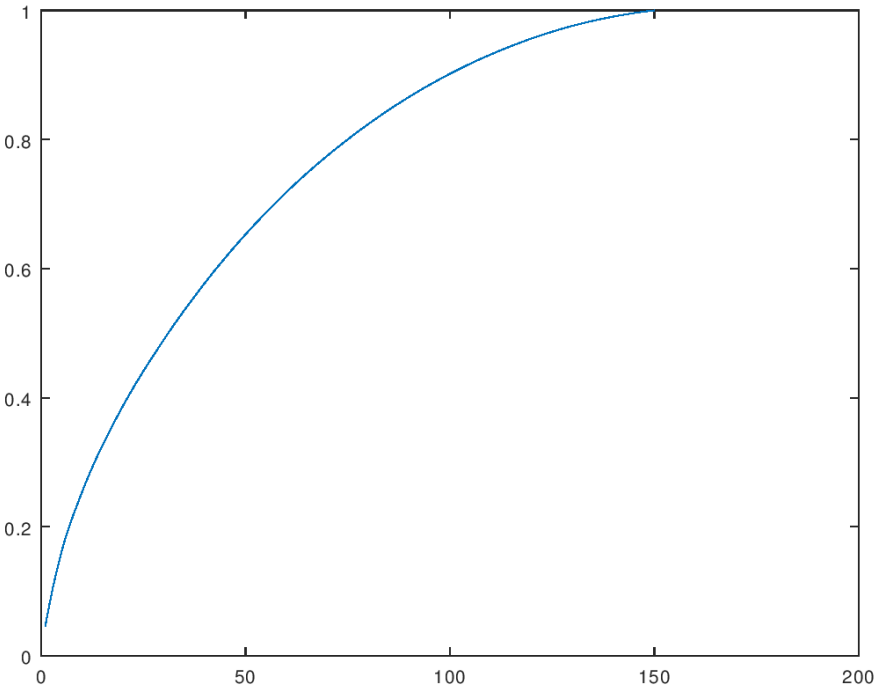
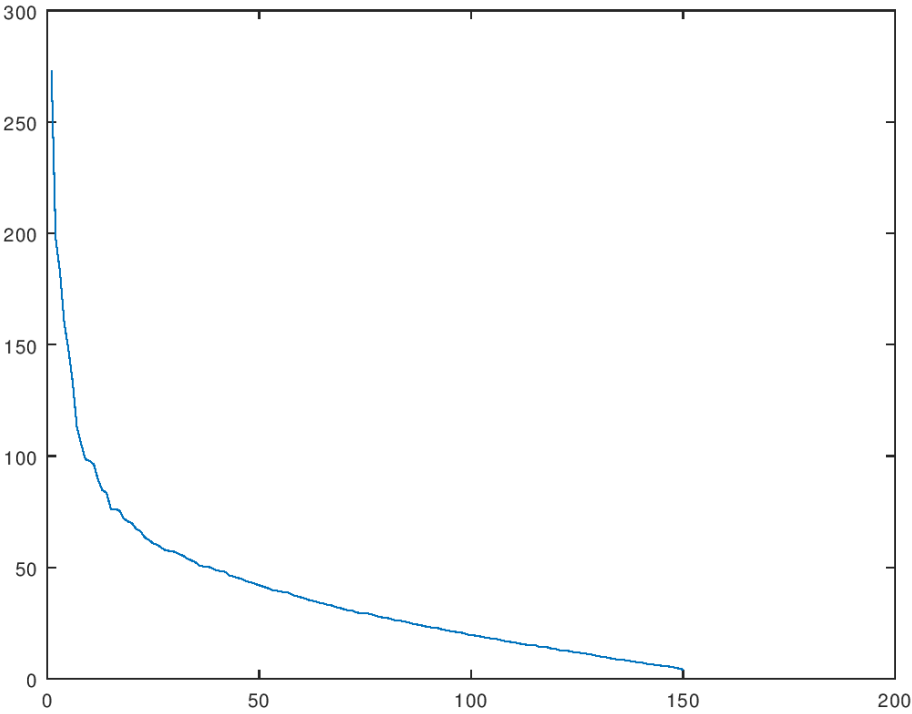
Am creat un vector al erorilor implementand formula data in enunt.

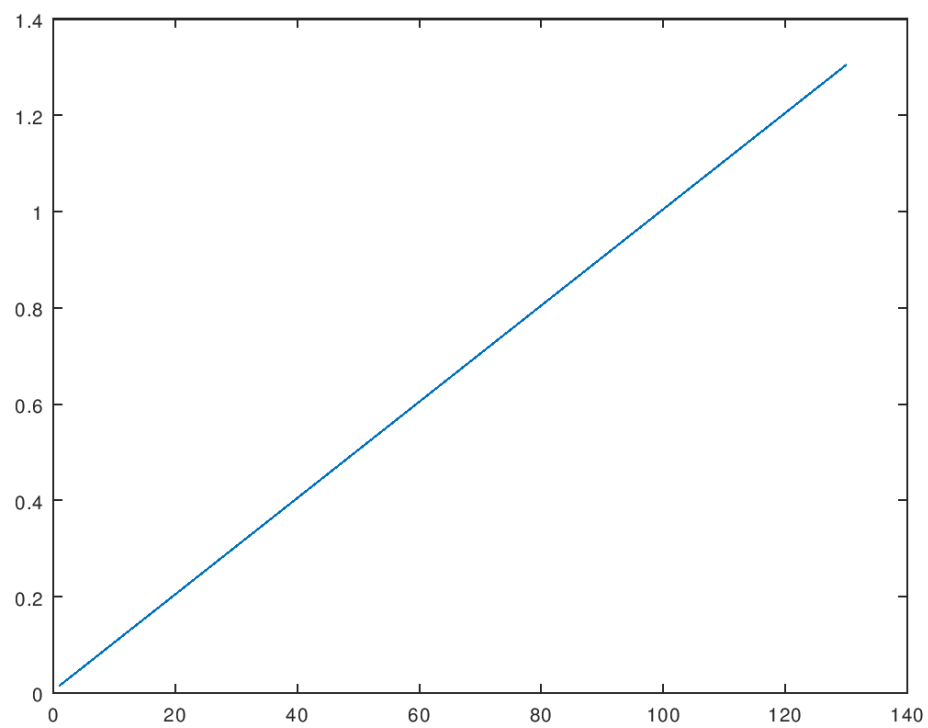
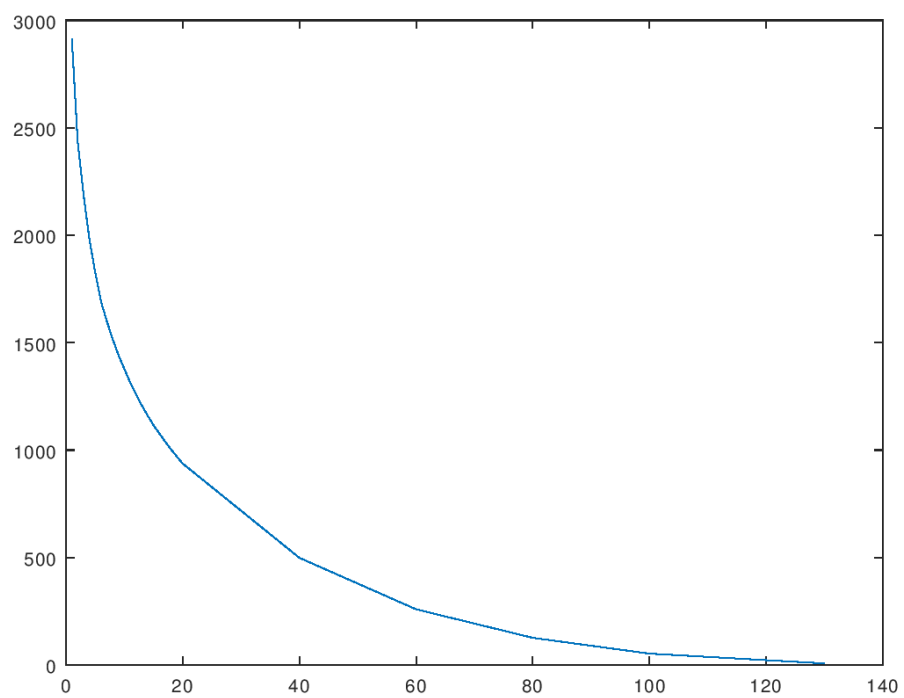
### 5.4.

Plot de formula data in enunt.

( Am folosit  $k$ -uri diferite la task-uri pentru a observa ca nu este vreo diferenta in alegerea sa )

Pentru imaginea 2 ( image2.gif )







Pentru imaginea 3 ( image3.gif )

