1.(a)Ax=b

A=

X=

b=

(b)

,0im cos(i)cos(i)cos(i)

,0im

,mim sin(i)sin(i)sin(i)

,mim

, 0im cos(i)

Let s

, 0im

According to , 0im

, mim sin(i)

Let s

, 0im

According to , mim

, 0im, mjm cos(i)

Let s

, 0im, mjm

According to , 0im, mjm

each column vector of A is orthogonal to each other.

(c) ,

(d)