2(a)

A=[0.866 0 -0.5 0 0 0;

0.5 0 0.866 0 0 0;

-0.866 -1 0 -1 0 0;

-0.5 0 0 0 -1 0;

0 1 0.5 0 0 0;

0 0 -0.866 0 0 -1];

B = [0;-1000;0;0;0;0];

X = linsolve(A,B)

X1 =-500.0220

X2= 433.0191

X3=-866.0381

X4=0.0000

X5=250.0110

X6=749.9890

(b)

y = inv(A)

y =

0.8660 0.5000 0 0 0 0

0.2500 -0.4330 0 0 1.0000 0

-0.5000 0.8660 0 0 0 0

-1.0000 0.0000 -1.0000 0 -1.0000 0

-0.4330 -0.2500 0 -1.0000 0 0

0.4330 -0.7500 0 0 0 -1.0000

©

z=det(A)

z =1.0000