**octave:1>**
**octave:1>** A=[3.6017 3 0;1 1.6017 1;0 2 2.6017]
A =

 3.6017 3.0000 0
 1.0000 1.6017 1.0000
 0 2.0000 2.6017

**octave:2>** A(2,:)=A(2,:)-A(1,:)/3.6017
A =

 3.6017 3.0000 0
 0 0.7688 1.0000
 0 2.0000 2.6017

**octave:3>** A(3,:)=A(3,:)-A(2,:)\*2/0.7688
A =

 3.6017 3.0000 0
 0 0.7688 1.0000
 0 0.0001 0.0002

**octave:4>** -1/0.7688
ans = -1.3007
**octave:5>** -3\*ans/3.6017
ans = 1.0834
*NOTICE: Due to inactivity, your session will expire in five minutes.*
*Octave Exited. Message: Session Timeout*

**octave:1>** A=[3 3 0;1 1 1;0 2 2]
A =

 3 3 0
 1 1 1
 0 2 2

**octave:2>** eig(A)
ans =

 -0.6017
 4.2618
 2.3399

**octave:3>** v=[1;1;1]
v =

 1
 1
 1

**octave:4>** z=A\*v
z =

 6
 3
 4

**octave:5>** lamda=norm(z,inf)
lamda = 6
**octave:6>** v=z/lamda
v =

 1.0000
 0.5000
 0.6667

**octave:7>** z=A\*v
z =

 4.5000
 2.1667
 2.3333

**octave:8>** v=z/lamda
v =

 0.7500
 0.3611
 0.3889

**octave:9>** v=z/lamda
v =

 0.7500
 0.3611
 0.3889

**octave:10>** z=A\*v
z =

 3.3333
 1.5000
 1.5000

**octave:11>** lamda=norm(z,inf)
lamda = 3.3333
**octave:12>** z=A\*v
z =

 3.3333
 1.5000
 1.5000

**octave:13>** v=[1;1;1]
v =

 1
 1
 1

**octave:14>** z=A\*v
z =

 6
 3
 4

**octave:15>** lambda=norm(z,inf)
lambda = 6
**octave:16>** v=z/lambda
v =

 1.0000
 0.5000
 0.6667

**octave:17>** z=A\*v
z =

 4.5000
 2.1667
 2.3333

**octave:18>** lambda=norm(z,inf)
lambda = 4.5000
**octave:19>** v=z/lambda
v =

 1.0000
 0.4815
 0.5185

**octave:20>** z=A\*v
z =

 4.4444
 2.0000
 2.0000

**octave:21>** lambda=norm(z,inf)
lambda = 4.4444
**octave:22>** v=z/lambda
v =

 1.0000
 0.4500
 0.4500

**octave:23>** z=A\*v
z =

 4.3500
 1.9000
 1.8000

**octave:24>** lambda=norm(z,inf)
lambda = 4.3500
**octave:25>** v=z/lambda
v =

 1.0000
 0.4368
 0.4138

*NOTICE: Due to inactivity, your session will expire in five minutes.*
*Octave Exited. Message: Session Timeout*

**octave:1>** A
*error: 'A' undefined near line 1, column 1*
**octave:2>** A=[3 3 0 ;1 1 1;0 2 2]
A =

 3 3 0
 1 1 1
 0 2 2

**octave:3>** v=[1 1 1]'
v =

 1
 1
 1

**octave:4>** z=inv(A)\*v
z =

 0.5000
 -0.1667
 0.6667

**octave:5>** lambda=1/norm(z,inf)
lambda = 1.5000
**octave:6>** v=z/norm(z,inf)
v =

 0.7500
 -0.2500
 1.0000

**octave:7>** z=inv(A)\*v
z =

 -0.7500
 1.0000
 -0.5000

**octave:8>** lambda=1/norm(z,inf)
lambda = 1
**octave:9>** v=z/norm(z,inf)
v =

 -0.7500
 1.0000
 -0.5000

**octave:10>** z=inv(A)\*v
z =

 1.2500
 -1.5000
 1.2500

**octave:11>** v=z/norm(z,inf)
v =

 0.8333
 -1.0000
 0.8333

**octave:12>** z=inv(A)\*v
z =

 -1.4167
 1.6944
 -1.2778

**octave:13>** lambda=1/norm(z,inf)
lambda = 0.5902
**octave:14>** v=z/norm(z,inf)
v =

 -0.8361
 1.0000
 -0.7541

**octave:15>** for i=1:10
> **>** z=inv(A)\*v
> **>** lambda=1/norm(z,inf)
> **>** v=z/norm(z,inf)
> **>** end for
*error: parse error:*

 *syntax error*

*>>> end for*
 *^*
**octave:15>** end
*error: parse error:*

 *syntax error*

*>>> end*
 *^*

**octave:15>** for i=1:10
> **>** z=inv(A)\*v
> **>** lambda=1/norm(z,inf)
> **>** v=z/norm(z,inf)
> **>** end
z =

 1.3770
 -1.6557
 1.2787

lambda = 0.6040
v =

 0.8317
 -1.0000
 0.7723

z =

 -1.3861
 1.6634
 -1.2772

lambda = 0.6012
v =

 -0.8333
 1.0000
 -0.7679

z =

 1.3839
 -1.6617
 1.2778

lambda = 0.6018
v =

 0.8328
 -1.0000
 0.7690

z =

 -1.3845
 1.6621
 -1.2776

lambda = 0.6017
v =

 -0.8330
 1.0000
 -0.7687

z =

 1.3843
 -1.6620
 1.2777

lambda = 0.6017
v =

 0.8329
 -1.0000
 0.7687

z =

 -1.3844
 1.6620
 -1.2776

lambda = 0.6017
v =

 -0.8329
 1.0000
 -0.7687

z =

 1.3844
 -1.6620
 1.2776

lambda = 0.6017
v =

 0.8329
 -1.0000
 0.7687

z =

 -1.3844
 1.6620
 -1.2776

lambda = 0.6017
v =

 -0.8329
 1.0000
 -0.7687

z =

 1.3844
 -1.6620
 1.2776

lambda = 0.6017
v =

 0.8329
 -1.0000
 0.7687

z =

 -1.3844
 1.6620
 -1.2776

lambda = 0.6017
v =

 -0.8329
 1.0000
 -0.7687