8.3、求矩阵A最大特征值对应的归一化的特征向量（MATLAB软件处理）

>> A=[1,5,3;1/5,1,1/3;1/3,3,1];

>> [v,d]=eig(A)

v =

0.9161 0.9161 0.9161

0.1506 -0.0753 - 0.1304i -0.0753 + 0.1304i

0.3715 -0.1857 + 0.3217i -0.1857 - 0.3217i

d =

3.0385 0 0

0 -0.0193 + 0.3415i 0

0 0 -0.0193 - 0.3415i

>> tbmax=max(d(:));

>> [m,n]=size(v);

>> sum = 0;

>> for i=1:m

sum = sum + v(i,1);end

>> tbvector = v(:,1);

>> for i=1:m

tbvector(i,1)= v(i,1)/sum;

end

>> disp('shu ru ju zheng wei:')

shu ru ju zheng wei:

>> A

A=

1.0000 5.0000 3.0000

0.2000 1.0000 0.3333

0.3333 3.0000 1.0000

>> v

v =

0.9161 0.9161 0.9161

0.1506 -0.0753 - 0.1304i -0.0753 + 0.1304i

0.3715 -0.1857 + 0.3217i -0.1857 - 0.3217i

>> d

d =

3.0385 0 0

0 -0.0193 + 0.3415i 0

0 0 -0.0193 - 0.3415i

>> disp('zui da te zheng zhi wei:')

zui da te zheng zhi wei:

>> tbmax

tbmax =

3.0385

>> disp('zui da ta zheng xaing liang dui ying de te zheng xiang liang wei:')

zui da ta zheng xaing liang dui ying de te zheng xiang liang wei:

>> tbvector

tbvector =

0.6370

0.1047

0.2583

8.4、方程=0的求解（MATLAB软件处理）

>> fplot('0.79\*t^2-3.44\*t-127.4',[-20,20])

>> grid on

>> fzero(inline('0.79\*t^2-3.44\*t-127.4'),[10,20])

ans =

15.0616

