Input for problem 1:

```
A=[0 .125 .26
.33 0 0
0 .75 .75]
eig(A)
```

Input for Problem 2:

```
A=[0 0 .19 .44 .50 .50 .45
.87 0 0 0 0 0 0
0 .87 0 0 0 0 0
0 0 .87 0 0 0 0
0 0 0 .87 0 0 0
0 0 0 0 .87 0 0
0 0 0 0 0 .87 .88];
[V,D]=eig(A)
v6=V(:,6)
v6=1/sum(v6)*v6
sum(v6)
```

Input for Problem 3

```
A=[.58 .02 .06 .10 .14
.12 .76 0 0 0
0 .12 .86 0 0
0 0 .14 .58 0
0 0 0 .38 .83]
eig(A)
```

Input for Problem 4:

```
A=[.58 .12 .36 .60 .84
.12 .76 0 0 0
0 .12 .86 0 0
0 0 .14 .58 0
0 0 0 .38 .83]
[V,D]=eig(A)
V3=V(:,3)
V3=1/sum(V3)*V3
sum(V3)
```

Input for Problem 5:

(1.1180-1)/1.1180