

```
A = [4 1 1;0 -2 2;0 5 -4]
```

```
A = 3x3
    4     1     1
    0    -2     2
    0     5    -4
```

```
x1 = [1;2;3]
```

```
x1 = 3x1
     1
     2
     3
```

```
x2 = [1;0;0]
```

```
x2 = 3x1
     1
     0
     0
```

```
x3 = [1;1;1]
```

```
x3 = 3x1
     1
     1
     1
```

```
norA1 = norm(A,1)
```

```
norA1 = 8
```

```
norx1 = norm(x1,1)
```

```
norx1 = 6
```

```
norx2 = norm(x2,1)
```

```
norx2 = 1
```

```
norx3 = norm(x3,1)
```

```
norx3 = 3
```

```
norm(A*x1)/norx1
```

```
ans = 1.5723
```

```
norm(A*x2)/norx2
```

```
ans = 4
```

```
norm(A*x3)/norx3
```

```
ans = 2.0276
```

```
norAinf = norm(A,"inf")
```

```
norAinf = 9
```

```
norx1 = norm(x1,"inf")
```

```
norx1 = 3
```

```
norx2 = norm(x2,"inf")
```

```
norx2 = 1
```

```
norx3 = norm(x3,"inf")
```

```
norx3 = 1
```

```
norm(A*x1)/norx1
```

```
ans = 3.1447
```

```
norm(A*x2)/norx2
```

```
ans = 4
```

```
norm(A*x3)/norx3
```

```
ans = 6.0828
```