

```
EDU>> P = [.2 .8 0 0 0; .6 .4 0 0 0; 0 0 .3 .7 0; 0 0 .5 .5 0
; .1 0 .1 .2 .5]
```

P =

0.2000	0.8000	0	0	0
0.6000	0.4000	0	0	0
0	0	0.3000	0.7000	0
0	0	0.5000	0.5000	0
0.1000	0	0.1000	0.2000	0.5000

P2 = P^2

P2 =

0.5200	0.4800	0	0	0
0.3600	0.6400	0	0	0
0	0	0.4400	0.5600	0
0	0	0.4000	0.6000	0
0.0700	0.0800	0.1800	0.2700	0.2500

P20 = P^20

P20 =

0.4286	0.5714	0	0	0
0.4286	0.5714	0	0	0

0	0	0.4167	0.5833	0
0	0	0.4167	0.5833	0
0.0857	0.1143	0.2500	0.3500	0.0000

$$P^{21} = P^{21}$$

$$P^{21} =$$

0.4286	0.5714	0	0	0
0.4286	0.5714	0	0	0
0	0	0.4167	0.5833	0
0	0	0.4167	0.5833	0
0.0857	0.1143	0.2500	0.3500	0.0000

$$PP = P([5 \ 1 \ 3 \ 2 \ 4], [5 \ 1 \ 3 \ 2 \ 4])$$

$$PP =$$

0.5000	0.1000	0.1000	0	0.2000
0	0.2000	0	0.8000	0
0	0	0.3000	0	0.7000
0	0.6000	0	0.4000	0
0	0	0.5000	0	0.5000

$$P =$$

0.2000	0.8000	0	0	0
--------	--------	---	---	---

0.6000	0.4000	0	0	0
0	0	0.3000	0.7000	0
0	0	0.5000	0.5000	0
0.1000	0	0.1000	0.2000	0.5000

??? P =

|

Error: Expected a variable, function, or constant, found "end of line".

EDU>> PPP = PP([2 4 3 5 1], [2 4 3 5 1])

PPP =

0.2000	0.8000	0	0	0
0.6000	0.4000	0	0	0
0	0	0.3000	0.7000	0
0	0	0.5000	0.5000	0
0.1000	0	0.1000	0.2000	0.5000

EDU>> PP20 = PP^20

PP20 =

0.0000	0.0857	0.2500	0.1143	0.3500
0	0.4286	0	0.5714	0
0	0	0.4167	0	0.5833

```
0 0.4286 0 0.5714 0
0 0 0.4167 0 0.5833
```

```
EDU>> PPP20 = PP20([2 4 3 5 1], [2 4 3 5 1])
```

```
PPP20 =
```

```
0.4286 0.5714 0 0 0
0.4286 0.5714 0 0 0
0 0 0.4167 0.5833 0
0 0 0.4167 0.5833 0
0.0857 0.1143 0.2500 0.3500 0.0000
```

```
EDU>> P20
```

```
P20 =
```

```
0.4286 0.5714 0 0 0
0.4286 0.5714 0 0 0
0 0 0.4167 0.5833 0
0 0 0.4167 0.5833 0
0.0857 0.1143 0.2500 0.3500 0.0000
```

```
EDU>>
```