

Finding the Jacobi transition matrix

Setup

We need to define the A matrix:

```
A = [3 -5 -8;  
     2  4  6;  
     3  4 -12];
```

Intermediate step

Now we find the lower and upper matrices:

```
% The -1 specifies the diagonal.  
L = -tril(A,-1);  
U = -triu(A,+1);
```

And the diagonal matrix:

```
D = diag(diag(A)); % No idea why twice.
```

Finally

```
T = D \ (L + U)
```

```
T = 3x3  
      0      1.6667      2.6667  
 -0.5000      0     -1.5000  
  0.2500      0.3333      0
```