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```
% ECE 4560 - Homework 6, Problem 3
% Caitlyn Caggia
```

```
what = [0      -1    -0.25;
        1       0     0.5;
        0.25  -0.5    0];
tau = 2;
```

```
w1 = what(3,2);
w2 = what(1,3);
w3 = what(2,1);
w = [w1; w2; w3];
wmag = sqrt(w1^2 + w2^2 + w3^2);
```

```
%Rodrigues' formula
```

```
expW = eye(3) + (what./wmag)*sin(wmag*tau) + (what^2./wmag^2)*(1-
cos(wmag*tau))
```

```
expW =
```

```
   -0.3436   -0.4979   -0.7963
    0.8140   -0.5807    0.0118
   -0.4683   -0.6441    0.6048
```

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