Matlab practice

Presume we have two vectors:

```
a=[0 3 2 1 0];
b=[0 0 -2 -1 2 0 6 4 2 0];
```

What is the result of the following:

```
b(4:6)
```

```
a'
```

[0; 3; 2; 1; 0]

```
a(1:2:5)
```

What is the position of maximum overlap between a and b, found by convolution (as define in class)?

What is the multiplication result at the position of maximum overlap?

Let us assume we have recorded the voltage responses v(t) from 20 neurons, over the course of 1000ms. The responses are in the 20x1000 matrix `neuronResponses`.

Each action potential is marked by the voltage rising above 5. (The resting state is -60.)
How can you determine the time of the first action potential for neuron 10?

CORRECTION: May 7, 2016

```
spikes=find(neuronResponses(10,:)>5);
spikes(1)
```

Write code to make a figure with four subplots, each subplot showing the voltage for neuron 5, 10, 15, and 20 respectively.

How can you compute the smallest voltage measured (across all neurons) at time t=1ms?

What is in the vector `w` as defined below?

```
for k=1:5,
  w(k) = 3*k;
end;
```