

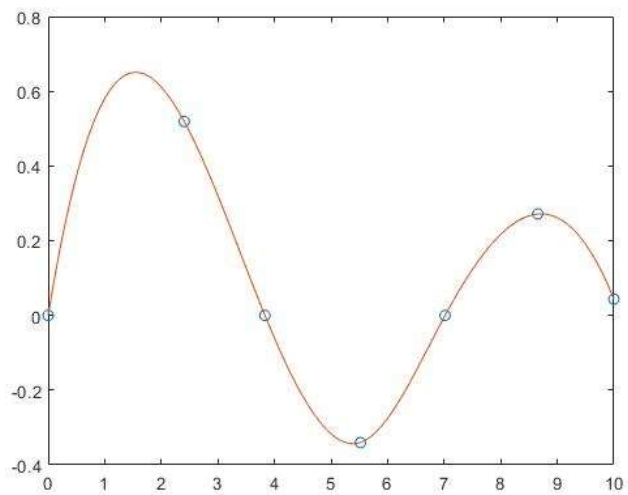
Matt McDade

ESC HW Problem #17

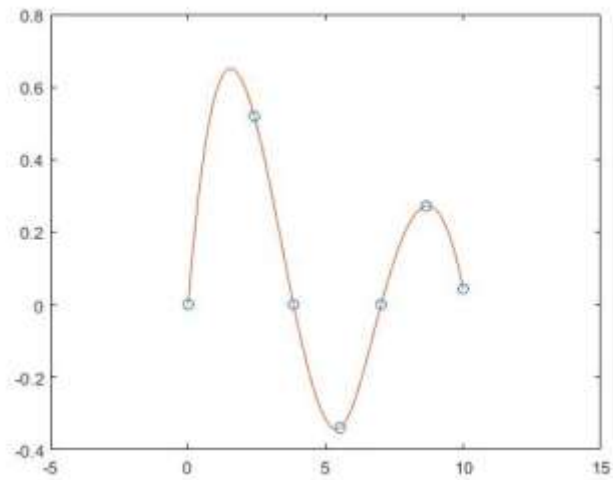
A) Don't know get the cubic functions between the intervals in Matlab, but here is the empty table set up

Interval	Cubic
0, 2.40482555769577	
2.40482555769577, 3.83170597020751	
3.83170597020751, 5.52007811028631	
5.52007811028631, 7.01558666981561	
7.01558666981561, 8.65372791291101	
8.65372791291101, 10	

B)



C)



CODE:

```
a = [0, 2.40482555769577, 3.83170597020751, 5.52007811028631,  
7.01558666981561, 8.65372791291101, 10];  
b = besselj(1,a);  
c = 0:0.1:10;  
d = spline(a,b,c);  
plot(a, b, 'o', c, d)  
xlim([-5 15])
```

The last line is what expands the graph to twice the range that the function spans. I don't know if this is what you were looking for but there you go!