

CS 184 - Splines Worksheet

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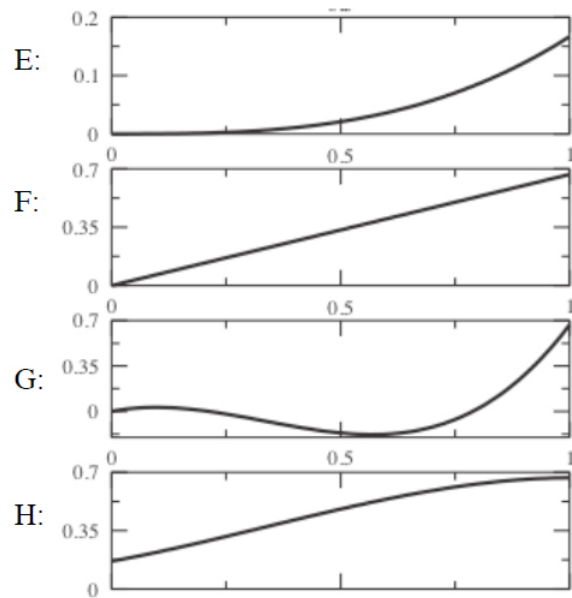
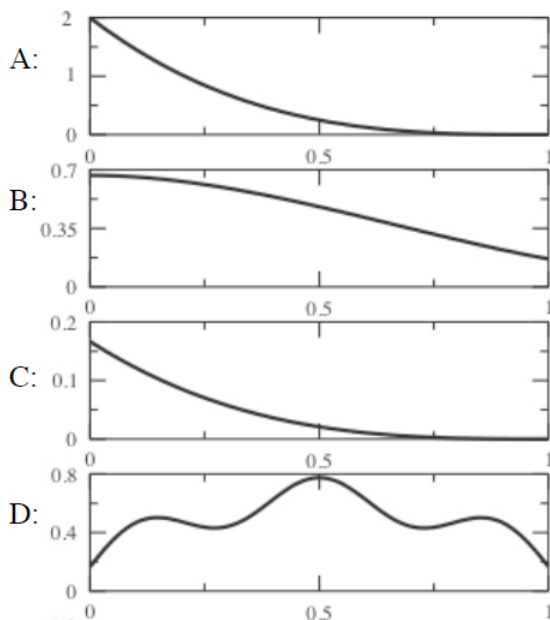
- Below are control points for two connected segments of a cubic Bezier curve. Point 5 is missing.
 - Place Point 5 so as to join the two segments with C^1 continuity.
 - Draw the resulting curve. Show the results of DeCasteljau evaluation at the the midpoints of the two segments.



- Fill in the following table of properties for three types of curves that we've studied in this class.

Curve Type	Interpolation?	Local Support?	Convex Hull?	Continuity?
Bezier				
Natural				
B-Splines				

11. There are 8 functions plotted below. Neatly cross out the ones that are not part of the cubic B-spline basis set. Number the remaining functions to show the order that they go together to form the B-spline “hump” function.



For those that are NOT B-spline basis functions write a single short sentence that explains why they could not be. Your reason should be simple. Note: “It isn’t what I have in my notes,” “it won’t fit,” “it doesn’t solve the equations,” or other generic answers will not be accepted.

Letter	Reason
_____	_____
_____	_____
_____	_____
_____	_____