

CMSC 460 - HW3

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1.a

Figure 1 shows interpolated value of x and y using each of the interpolation methods.

1.b

For each of the interpolation methods I evaluated the function at $x = -0.3$. In this case I prefer the result of *pchiptx*. Its smooth and makes minimal assumptions about the shape of the function.

piecelin

$$p(-0.3) = 0.42996$$

polyinterp

$$p(-0.3) = -0.999$$

splinetx

$$p(-0.3) = -0.1957$$

pchiptx

$$p(-0.3) = 0.43218$$

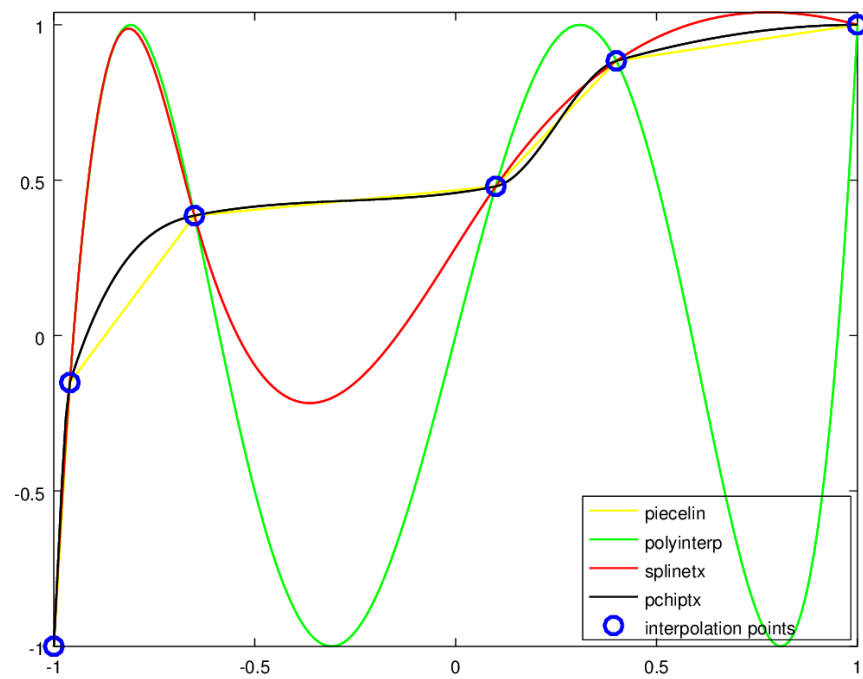


Figure 1: 4 different ways to interpolate between 6 points

1.c

2

3