

```
XY := rkfixed(0, 0, 2 * pi, 3, D(x, y) := cos(x))
```

appVersion(4) = "0.99.7921.69"

$$X := \text{col}(XY, 1) = \begin{bmatrix} 0 \\ 2.094 \\ 4.189 \\ 6.283 \end{bmatrix} \quad Y := \text{col}(XY, 2) = \begin{bmatrix} 0 \\ 0.873 \\ -0.873 \\ 9.992 \cdot 10^{-16} \end{bmatrix}$$

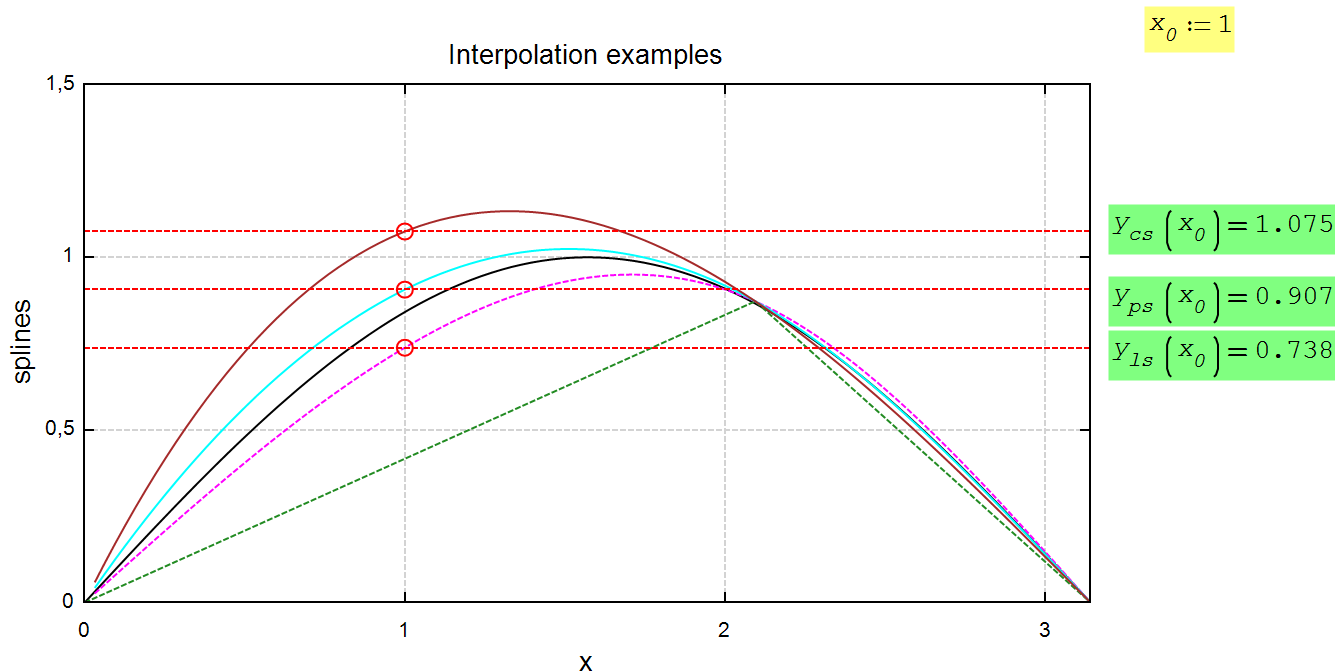
- interp()
- lspline()
- pspline()
- cspline()

Linear interpolation: $Y_{li}(x) := \text{linterp}(X, Y, x)$

$Y_{ls}(x) := \text{interp}(\text{lspline}(X, Y), X, Y, x)$ - cubic spline linear at the endpoint (natural)

$Y_{ps}(x) := \text{interp}(\text{pspline}(X, Y), X, Y, x)$ - cubic spline parabolic at the endpoint

$Y_{cs}(x) := \text{interp}(\text{cspline}(X, Y), X, Y, x)$ - cubic spline



$x_0 := 1$

$Y_{cs}(x_0) = 1.075$
 $Y_{ps}(x_0) = 0.907$
 $Y_{ls}(x_0) = 0.738$

- $\sin(x)$
- $Y_{li}(x)$
- $Y_{ls}(x)$
- $Y_{ps}(x)$
- $Y_{cs}(x)$
- $Y_{ls}(x_0)$
- $Y_{ps}(x_0)$
- $Y_{cs}(x_0)$
- $\begin{bmatrix} x_0 & Y_{ls}(x_0) & "o" \end{bmatrix}$
- $\begin{bmatrix} x_0 & Y_{ps}(x_0) & "o" \end{bmatrix}$
- $\begin{bmatrix} x_0 & Y_{cs}(x_0) & "o" \end{bmatrix}$