

$$\begin{aligned}
 P(X) &= \frac{(X-X_2)(X-X_3)}{(X_1-X_2)(X_1-X_3)} Y_1 \\
 &+ \frac{(X-X_1)(X-X_3)}{(X_2-X_1)(X_2-X_3)} Y_2 \\
 &+ \frac{(X-X_1)(X-X_2)}{(X_3-X_1)(X_3-X_2)} Y_3
 \end{aligned}$$

$$\begin{aligned}
 Y_{12} &= \text{FLINE}(X_1, Y_1, X_2, Y_2, X) \\
 &= \frac{(Y_1(X_2-X) + Y_2(X-X_1))}{(X_2-X_1)}
 \end{aligned}$$

$$\begin{aligned}
 Y_{23} &= \text{FLINE}(X_2, Y_2, X_3, Y_3, X) \\
 &= \frac{(Y_2(X_3-X) + Y_3(X-X_2))}{(X_3-X_2)}
 \end{aligned}$$

$$\begin{aligned}
 Y_{123} &= \text{FLINE}(X_1, Y_{12}, X_3, Y_{23}, X) \\
 &= \frac{(Y_{12}(X_3-X) + Y_{23}(X-X_1))}{(X_3-X_1)}
 \end{aligned}$$

$$Y_{123} = \left[\frac{Y_1(X_2 - X) + Y_2(X - X_1)}{(X_2 - X_1)(X_3 - X_1)} \right] (X_3 - X) \\ + \left[\frac{Y_2(X_3 - X) + Y_3(X - X_2)}{(X_3 - X_2)(X_3 - X_1)} \right] (X - X_1)$$

$$Y_{123} = \left[\frac{Y_1(X_2 - X) + Y_2(X - X_1)}{(X_2 - X_1)(X_3 - X_1)(X_3 - X_2)} \right] (X_3 - X)(X_3 - X_2) \\ + \left[\frac{Y_2(X_3 - X) + Y_3(X - X_2)}{(X_2 - X_1)(X_3 - X_1)(X_3 - X_2)} \right] (X - X_1)(X_2 - X_1)$$

$$\left[(X_2 - X_1)(X_3 - X_1)(X_3 - X_2) \right] Y_{123} = \\ Y_1 \left[(X_2 - X)(X_3 - X)(X_3 - X_2) \right] \\ + Y_2 \left[(X - X_1)(X_3 - X)(X_3 - X_2) + (X_3 - X)(X - X_1)(X_2 - X_1) \right] \\ + Y_3 \left[(X - X_2)(X - X_1)(X_2 - X_1) \right]$$

$$\begin{aligned}
 Y_{123} = & \frac{Y_1 [(x_2 - x)(x_3 - x)(x_3 - x_2)]}{(x_2 - x_1)(x_3 - x_1)(x_3 - x_2)} \\
 & + \frac{Y_2 [(x_3 - x)(x - x_1)(x_3 - x_1)]}{(x_2 - x_1)(x_3 - x_1)(x_3 - x_2)} \\
 & + \frac{Y_3 [(x - x_2)(x - x_1)(x_2 - x_1)]}{(x_2 - x_1)(x_3 - x_1)(x_3 - x_2)}
 \end{aligned}$$

$$\begin{aligned}
 Y_{123} = & Y_1 \frac{(x_2 - x_1)(x_3 - x)}{(x_2 - x_1)(x_3 - x_1)} \\
 & + Y_2 \frac{(x_3 - x)(x - x_1)}{(x_2 - x_1)(x_3 - x_2)} \\
 & + Y_3 \frac{(x - x_2)(x - x_1)}{(x_3 - x_1)(x_3 - x_2)}
 \end{aligned}$$