**Line-element examples for grey samples ($0,2 \leq x=Y/Y_u \leq 5$)**

$F(x)$ is called the line-element function of $f(x)$.

The following relations are valid for $x=Y/Y_u=Y/18$:

$$\frac{d[F(x)]}{dx} = f(x) \qquad [1]$$

$$F(x) = \int \frac{f'(x)}{f(x)} \, dx \qquad [2]$$

Example for all normalized tristimulus values $x=Y/Y_u$, for example for $Y_N=3,6$, $Y_u=18$, $Y_W=90$.

$$\frac{d[k_u(x)^{1/3} - 16]}{dx} = [k_u(x)^{-2/3}]/3 \qquad [3]$$

$$k_u(x)^{1/3} + \text{const} \int \frac{k_u(x)^{-2/3}}{3} \qquad [4]$$