

Hausübung Nullstellen

Notiztitel

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$$a) f(x) = x^3 - 2x^2$$

$$0 = x^3 - 2x^2$$

$$0 = x^2(x-2) \quad N_1(0/0)$$

$$0 = x - 2$$

$$x = 2 \quad N_2(2/0)$$

$$b) f(x) = x^3 - x^2 + x - 1$$

$$0 = x^3 - x^2 + x - 1$$

1. Ns Raten $N_1(1/0)$

Polynomdivision

$$(x^3 - x^2 + x - 1) : (x - 1) = x^2 + 1$$

$$\begin{array}{r} \underline{+x^3 - x^2} \\ 0 + x - 1 \\ \text{OREST} \end{array}$$

$$0 = x^2 + 1$$

$$x^2 = -1$$

$$x = \pm \sqrt{-1}$$

$$x = \pm i \quad \text{Imaginär}$$