

M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren
$x^2 - 4x = 0$	$x^2 - 6x + 9 = 0$	$x^2 - 49 = 0$
M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren
$x^3 - x = 0$	$(x-4)(x+2)(x+9) = 0$	$(x+2)(\ln(x)-1) = 0$
M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren
$x \cdot e^x - 3 \cdot e^x = 0$	$2^x \cdot x + 5 \cdot 2^x = 0$	$x^4 - 7x^3 = 0$
M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren
$x^4 - 2x^2 + 1 = 0$	$2x^2 - 10x = 0$	$x^2 + 10x + 25 = 0$
M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren	M_10_L_32   Gleichungen - Faktorisieren
$x^4 - 3x^2 = 0$	$e^x + 5x \cdot e^x = 0$	$(x^2 - 1)\left(x - \frac{3}{2}\right)(2x + 9) = 0$

$$\begin{aligned}x^2-49 &= 0 \\(x+7)(x-7) &= 0 \\x_1 &= -7 \\x_2 &= 7\end{aligned}$$

03

$$\begin{aligned}x^2-6x+9 &= 0 \\(x-3)^2 &= 0 \\x &= 3\end{aligned}$$

02

$$\begin{aligned}x^2-4x &= 0 \\x(x-4) &= 0 \\x_1 &= 0 \\x_2 &= 4\end{aligned}$$

01

$$\begin{aligned}(x+2)(\ln(x)-1) &= 0 \\x_1 &= -2 \\ \ln(x)-1 &= 0 \\ \ln(x) &= 1 \\x_2 &= e\end{aligned}$$

06

$$\begin{aligned}(x-4)(x+2)(x+9) &= 0 \\x_1 &= 4 \\x_2 &= -2 \\x_3 &= -9\end{aligned}$$

05

$$\begin{aligned}x^3-x &= 0 \\x(x^2-1) &= 0 \\x(x-1)(x+1) &= 0 \\x_1 &= 0 \\x_2 &= 1 \\x_3 &= -1\end{aligned}$$

04

$$\begin{aligned}x^4-7x^3 &= 0 \\x^3(x-7) &= 0 \\x_1 &= 0 \\x_2 &= 7\end{aligned}$$

09

$$\begin{aligned}2^x \cdot x + 5 \cdot 2^x &= 0 \\2^x(x+5) &= 0 \\x &= -5\end{aligned}$$

08

$$\begin{aligned}x \cdot e^x - 3 \cdot e^x &= 0 \\e^x(x-3) &= 0 \\x &= 3\end{aligned}$$

07

$$\begin{aligned}x^2+10x+25 &= 0 \\(x+5)^2 &= 0 \\x &= -5\end{aligned}$$

12

$$\begin{aligned}2x^2-10x &= 0 \\2x(x-5) &= 0 \\x_1 &= 0 \\x_2 &= 5\end{aligned}$$

11

$$\begin{aligned}x^4-2x^2+1 &= 0 \\(x^2-1)^2 &= 0 \\(x+1)^2(x-1)^2 &= 0 \\x_1 &= -1 \\x_2 &= 1\end{aligned}$$

10

$$\begin{aligned}(x^2-1)\left(x-\frac{3}{2}\right)(2x+9) &= 0 \\x_1 &= 1 \\x_2 &= -1 \\x_3 &= \frac{3}{2} \\x_4 &= -4,5\end{aligned}$$

15

$$\begin{aligned}e^x+5x \cdot e^x &= 0 \\e^x(1+5x) &= 0 \\x &= -\frac{1}{5}\end{aligned}$$

14

$$\begin{aligned}x^4-3x^2 &= 0 \\x^2(x^2-3) &= 0 \\x_1 &= 0 \\x_2 &= +\sqrt{3} \\x_3 &= -\sqrt{3}\end{aligned}$$

13