



## Faktorisieren: Ausklammern

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$$\begin{array}{cc} \oplus & \text{🌶️} \\ \frac{7}{6}t^4x^5 - \frac{1}{12}t^3x^3 & \\ \frac{1}{3}t^3 & \frac{1}{2}x^3 \end{array}$$

$$\begin{array}{cc} 4x^5 - 5x^3 + x^2 & \\ 5x \left( \frac{4}{5}x^4 - x^2 + \frac{1}{5}x \right) & 2x^2 \left( 2x^3 - \frac{5}{2}x + \frac{1}{2} \right) \oplus \end{array}$$

$$\begin{array}{cc} \oplus & \text{🌶️} \\ 3x^3 + 12x^2 + 6x & \\ x & 3 \end{array}$$

$$\begin{array}{cc} 12x^6 - 6x^2 + 18x & \\ 6x(2x^5 - x + 3) & 3x(4x^5 - 2x + 6) \oplus \end{array}$$

$$\begin{array}{cc} \oplus & \text{🌶️🌶️} \\ a^3b^2 - a^5b^4 & \\ a^3 & b^2 \end{array}$$

$$\begin{array}{cc} 6a^4x^2 - 12a^2x^3 & \\ 6a^2(a^2x^2 - 2x^3) & 3x^2(2a^4 - 4a^2x) \oplus \end{array}$$

$$\begin{array}{cc} \oplus & \text{🌶️} \\ 12tx^4 - 36t^2x^5 + 24tx & \\ 3x & 4t \end{array}$$

$$\begin{array}{cc} \frac{4t^5}{6p^7} + \frac{8t^3}{18p^7} & \\ \frac{4}{p^4} \left( \frac{t^5}{6p^3} + \frac{2t^3}{18p^3} \right) & \frac{t^2}{3} \left( \frac{4t^3}{2p^7} + \frac{8t}{6p^7} \right) \oplus \end{array}$$

$$\begin{array}{cc} \oplus & \text{🌶️} \\ \frac{a^5}{x^7} - \frac{a^6}{x^5} & \\ a^5 & \frac{1}{x^5} \end{array}$$

$$\begin{array}{cc} (-6ab^4) & -6a^3b^2 + 18a^5b^3 & (-3a^4b) \\ (a^2b^{-2} - 3a^4b^{-1}) & & (2a^{-1}b - 6ab^2) \oplus \end{array}$$

$$\begin{array}{cc} \oplus & \text{🌶️🌶️} \\ e^{x+3} - 4e^{2x+4} & \\ e^2 & e^x \end{array}$$

$$\begin{array}{cc} a^2b^3 - ab^2 + a^3b & \\ b(a^2b^2 - ab + a^3) & a(ab^3 - b^2 + a^2b) \oplus \end{array}$$

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$$\begin{array}{cc} \frac{7}{6}t^4x^5 - \frac{1}{12}t^3x^3 & \oplus \\ \frac{1}{2}x^3 \left( \frac{7}{3}t^4x^2 - \frac{1}{6}t^3 \right) & \frac{1}{3}t^3 \left( \frac{7}{2}tx^5 - \frac{1}{4}x^3 \right) \end{array}$$

$$\begin{array}{cc} \text{🌶️🌶️} & 4x^5 - 5x^3 + x^2 \\ 2x^2 & 5x \oplus \end{array}$$

$$\begin{array}{cc} 3x^3 + 12x^2 + 6x & \oplus \\ 3(x^3 + 4x^2 + 2x) & x(3x^2 + 12x + 6) \end{array}$$

$$\begin{array}{cc} \text{🌶️} & 12x^6 - 6x^2 + 18x \\ 3x & 6x \oplus \end{array}$$

$$\begin{array}{cc} a^3b^2 - a^5b^4 & \oplus \\ b^2(a^3 - a^5b^2) & a^3(b^2 - a^2b^4) \end{array}$$

$$\begin{array}{cc} \text{🌶️} & 6a^4x^2 - 12a^2x^3 \\ 3x^2 & 6a^2 \oplus \end{array}$$

$$\begin{array}{cc} 12tx^4 - 36t^2x^5 + 24tx & \oplus \\ 4t(3x^4 - 9tx^5 + 6x) & 3x(4tx^3 - 12t^2x^4 + 8t) \end{array}$$

$$\begin{array}{cc} \text{🌶️} & \frac{4t^5}{6p^7} + \frac{8t^3}{18p^7} \\ \frac{t^2}{3} & \frac{4}{p^4} \oplus \end{array}$$

$$\begin{array}{cc} \frac{a^5}{x^7} - \frac{a^6}{x^5} & \oplus \\ \frac{1}{x^5} \left( \frac{a^5}{x^2} - a^6 \right) & a^5 \left( \frac{1}{x^7} - \frac{a}{x^5} \right) \end{array}$$

$$\begin{array}{cc} \text{🌶️🌶️} & -6a^3b^2 + 18a^5b^3 \\ -3a^4b & -6ab^4 \oplus \end{array}$$

$$\begin{array}{cc} e^{x+3} - 4e^{2x+4} & \oplus \\ e^x(e^3 - 4e^{x+4}) & e^2(e^{x+1} - 4e^{2x+2}) \end{array}$$

$$\begin{array}{cc} \text{🌶️} & a^2b^3 - ab^2 + a^3b \\ a & b \oplus \end{array}$$