



## Faktorisieren: Ausklammern

Ausklammern

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$$\frac{7}{6}t^4x^5 - \frac{1}{12}t^3x^3$$

$$\frac{1}{3}t^3$$

$$\frac{1}{2}x^3$$

$$4x^5 - 5x^3 + x^2$$

$$5x \left( \frac{4}{5}x^4 - x^2 + \frac{1}{5}x \right) \quad 2x^2 \left( 2x^3 - \frac{5}{2}x + \frac{1}{2} \right)$$



$$3x^3 + 12x^2 + 6x$$

$$x$$

$$3$$

$$12x^6 - 6x^2 + 18x$$

$$6x(2x^5 - x + 3) \quad 3x(4x^5 - 2x + 6)$$



$$a^3b^2 - a^5b^4$$

$$a^3$$

$$b^2$$

$$6a^4x^2 - 12a^2x^3$$

$$6a^2(a^2x^2 - 2x^3) \quad 3x^2(2a^4 - 4a^2x)$$



$$12tx^4 - 36t^2x^5 + 24tx$$

$$3x$$

$$4t$$

$$\frac{4t^5}{6p^7} + \frac{8t^3}{18p^7}$$

$$\frac{4}{p^4} \left( \frac{t^5}{6p^3} + \frac{2t^3}{18p^3} \right) \quad \frac{t^2}{3} \left( \frac{4t^3}{2p^7} + \frac{8t}{6p^7} \right)$$



$$\frac{a^5}{x^7} - \frac{a^6}{x^5}$$

$$a^5$$

$$\frac{1}{x^5}$$

$$\begin{pmatrix} -6ab^4 \\ a^2b^{-2} - 3a^4b^{-1} \end{pmatrix} \quad -6a^3b^2 + 18a^5b^3 \quad \begin{pmatrix} -3a^4b \\ 2a^{-1}b - 6ab^2 \end{pmatrix}$$



$$e^{x+3} - 4e^{2x+4}$$

$$e^2$$

$$e^x$$

$$a^2b^3 - ab^2 + a^3b$$

$$b(a^2b^2 - ab + a^3) \quad a(ab^3 - b^2 + a^2b)$$

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$$\frac{7}{6}t^4x^5 - \frac{1}{12}t^3x^3$$

$$\frac{1}{2}x^3 \left( \frac{7}{3}t^4x^2 - \frac{1}{6}t^3 \right) \quad \frac{1}{3}t^3 \left( \frac{7}{2}tx^5 - \frac{1}{4}x^3 \right)$$



$$4x^5 - 5x^3 + x^2$$

$$2x^2$$

$$5x$$

$$3x^3 + 12x^2 + 6x$$

$$3(x^3 + 4x^2 + 2x)$$

$$x(3x^2 + 12x + 6)$$



$$12x^6 - 6x^2 + 18x$$

$$3x$$

$$6x$$

$$a^3b^2 - a^5b^4$$

$$b^2(a^3 - a^5b^2)$$

$$a^3(b^2 - a^2b^4)$$

$$6a^4x^2 - 12a^2x^3$$

$$3x^2$$

$$6a^2$$

$$12tx^4 - 36t^2x^5 + 24tx$$

$$4t(3x^4 - 9tx^5 + 6x)$$

$$3x(4tx^3 - 12t^2x^4 + 8t)$$



$$\frac{4t^5}{6p^7} + \frac{8t^3}{18p^7}$$

$$\frac{t^2}{3}$$

$$\frac{4}{p^4}$$

$$\frac{a^5}{x^7} - \frac{a^6}{x^5}$$

$$\frac{1}{x^5} \left( \frac{a^5}{x^2} - a^6 \right)$$

$$a^5 \left( \frac{1}{x^7} - \frac{a}{x^5} \right)$$

$$-6a^3b^2 + 18a^5b^3$$

$$-3a^4b$$

$$-6ab^4$$

$$e^{x+3} - 4e^{2x+4}$$

$$e^x(e^3 - 4e^{x+4})$$

$$e^2(e^{x+1} - 4e^{2x+2})$$

$$a^2b^3 - ab^2 + a^3b$$

$$a$$

$$b$$