

S.72

Polynomien yhteen- ja vähennyslasku

Polynomi: esim.

$$2x + 2 \quad (\text{lauseke})$$

eri muotoiset termit

esim.

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

Sievennä näiden polynomien

a) Summa $(2x + 2) + (3x^2 - 4x + 5)$

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

$$= 3x^2 - 2x + 7$$

$$\begin{array}{l} +(+2) \\ = +2 \end{array}$$

$$2 - 4 = -2$$

$$2 + 5 = 7$$

b) erotus

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

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

$$= -3x^2 + 6x - 3$$

$$\begin{array}{l} -(+2) \\ = -2 \end{array}$$

$$\begin{array}{l} -(-2) \\ = +2 \end{array}$$

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361 a) $4h + 2h = 6h$

b) $3k^2 + 5k^2 = 8k^2$

c) $8u^5 - 2u^5 = 6u^5$

d) $-6w^3 - 7w^3 = -13w^3$

362 a) $-6q^3 + 4q^3 = -2q^3$

b) $2b^4 - 7b^4 = -5b^4$

$$c) -8s^2 - 3s^2 = -11s^2$$

$$d) 5v^6 + 3v^6 - 7v^6 = v^6$$

$$(363) a) \underline{8g^2} - 4g + \underline{2g^2}$$

$$= \underline{10g^2} - 4g$$

$$b) -6n^2 + \cancel{3n^5} - \cancel{3n^5} = -6n^2$$

$$c) \underline{-9a^6} - \underline{3a^4} + \underline{7a^6} - \underline{2a^4}$$

$$= -2a^6 - 5a^4$$

$$d) 5\ddot{a} - 3k + 4k - 7\ddot{a} + \ddot{a}$$

$$= k - \ddot{a}$$

$$(364) a) (2x + 5) + (-4x - 6)$$

$$= 2x + 5 - 4x - 6$$

$$= -2x - 1$$

$$b) (-7c^2 + 3c) + (c^2 - 8)$$

$$= \underline{-7c^2} + 3c + \underline{c^2} - 8$$

$$= -6c^2 + 3c - 8$$

$$c) (3x^2 - 1) + (x^3 - 4x)$$

$$= 3x^2 - 1 + x^3 - 4x$$

$$= x^3 + 3x^2 - 4x - 1$$

$$d) 12a^3 - (-4a^3 - 6a^2) + 9a^2$$

$$= 12a^3 + \underline{4a^3} + 6a^2 + 9a^2 = 16a^3 + 15a^2 + 12a$$