Polynomien kertolasku

Esim. Sievennä

a) $3x^2 \cdot 2x^3 = 3 \cdot 2 \cdot x \cdot x \cdot x \cdot x \cdot x = 6x^5$

TAI $= 3 \cdot 2 \cdot x^{2+3} = 6x^5$

b) $4x(-3x^2+2x) = 4 \cdot (-3)x^{1+2} + 4 \cdot 2x^{1+1} = -12x^3 + 8x^2$

c) $(5x^2-2x)(-3x+1) = -15x^3 + 5x^2 + 6x^2 - 2x$

$= -15x^3 + 11x^2 - 2x$

d) $(-4x^2+2)^2 = (-4x^2+2)(-4x^2+2) = 16x^4 - 8x^2 - 8x^2 + 4$

$= 16x^4 - 16x^2 + 4$

2.9 Olkoon $P(x)=3x^2-5x$ ja $Q(x)=2x^2-4x+2$. Sievennä CAS-laskimella.

a) $P(x)Q(x)$

b) $2xP(x)-3xQ(x)$