5.1

>

1

> $expand((x+1)\cdot(x+2))$

$$x^2 + 3x + 2 \tag{1}$$

2

> $expand((x^2+x-1)\cdot(x^2+x+1))$

$$x^4 + 2x^3 + x^2 - 1 \tag{2}$$

3

> $expand((x+y)^{10})$

$$x^{10} + 10x^9y + 45x^8y^2 + 120x^7y^3 + 210x^6y^4 + 252x^5y^5 + 210x^4y^6 + 120x^3y^7 + 45x^2y^8 \tag{3}$$
$$+ 10xy^9 + y^{10}$$

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