

## Adding and Subtracting Polynomials

### Adding Polynomials

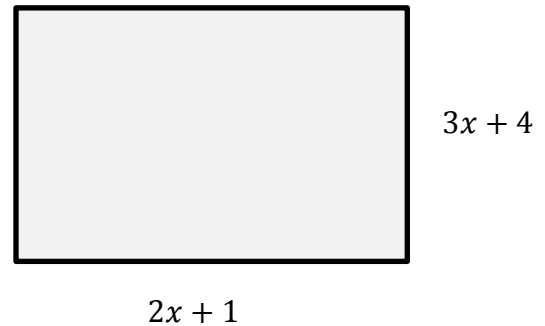
**Ex 1.**

Add and write the resulting polynomial in descending order of degree.

$$(-2x^3 - 5x + 7) + (3x^2 - 8x - 4)$$

**Ex 2.**

Write an expression in simplest form for the perimeter of the rectangle shown.



### Subtracting Polynomials

To subtract polynomials, you can turn the problem into addition:

$$\begin{aligned} & (5x^2 + 6x + 3) - (2x^2 + x + 1) \\ &= (5x^2 + 6x + 3) + (-2x^2 - x - 1) \\ &= 3x^2 + 5x + 2 \end{aligned}$$

**Ex 3.**

Subtract and write the resulting polynomial in descending order of degree.

$$(x^4 - 9x^2 + 2) - (2x^4 + 4x^3 + 2x^2 - 7)$$