

29. Développer et réduire les expressions.

- 1° $(x + 3)^2 + x^2 - 7x$;
 2° $(2x + 1)^2 - 3x^2 + 8$;
 3° $(x - 2)^2 + (x - 5)(x - 4)$;
 4° $(4x - 3)(4x + 3) + (x - 5)^2$.

Exercice 7° (29 p 35)

$$\begin{aligned} 1^\circ (x + 3)^2 + x^2 - 7x \\ = x^2 + 6x + 9 + x^2 - 7x \\ = 2x^2 - x + 9. \end{aligned}$$

$$\begin{aligned} 2^\circ (2x + 1)^2 - 3x^2 + 8 \\ = 4x^2 + 4x + 1 - 3x^2 + 8 \\ = x^2 + 4x + 9 \end{aligned}$$

$$\begin{aligned} 3^\circ (x - 2)^2 + (x - 5)(x - 4) \\ = x^2 - 4x + 4 + x \times x + x \times (-4) - 5 \times x - 5 \times (-4) \\ = x^2 - 4x + 4 + x^2 - 4x - 5x + 20 \\ = 2x^2 - 13x + 24 \end{aligned}$$

$$\begin{aligned} 4^\circ (4x - 3)(4x + 3) + (x - 5)^2 \\ = 16x^2 - 9 + x^2 - 10x + 25 \\ = 17x^2 - 10x + 16 \end{aligned}$$