

Expand and simplify

$$\begin{aligned} & 3a(a+1) - 2a^2(a-7) - (a^3 + 7a^2 - 4a + 1) \\ &= 3a^2 + 3a - 2a^3 + 14a^2 - a^3 - 7a^2 + 4a - 1 \\ &= -3a^3 + 10a^2 + 7a - 1 \end{aligned}$$

$$\begin{aligned} & \bullet 2(x-3)(x-2) - 3(x-2)^2 + 5(x-5)(x+5) \\ &= 2(x^2 - 2x - 3x + 6) - 3(x^2 - 4x + 4) + 5(x^2 - 25) \\ &= 2(x^2 - 5x + 6) - 3(x^2 - 4x + 4) + 5(x^2 - 25) \\ &= 2x^2 - 10x + 12 - 3x^2 + 12x - 12 + 5x^2 - 125 \\ &= 4x^2 + 2x - 125 \end{aligned}$$

$$\begin{aligned} & (2a-3b)(4a^2+6ab+9b^2) - 8(a^3-b^3) \\ &= 8a^3 + 12a^2b + 18ab^2 - 12ab^2 - 18ab^2 - 27b^3 - 8a^3 + 8b^3 \\ &= -19b^3 \end{aligned}$$

p. 13. Ex 1.8.

1(b, c) 2(a, b).

