

### Ex 2.2.1

a) → i) et k) l) voir réponses brochure

$$\begin{aligned} \text{j) } \underbrace{(2a+3b)(2x+y)}_{2 \text{ termes}} + \underbrace{(3a+5b)(2x+y)}_{2 \text{ termes}} &= (2x+y) \left[ \underbrace{(2a+3b)}_{2 \text{ termes}} + \underbrace{(3a+5b)}_{2 \text{ termes}} \right] \\ &= \underline{(2x+y)(5a+8b)} \end{aligned}$$

$$\begin{aligned} \text{m) } \underbrace{(x-3)(x+1)}_{3 \text{ termes}} + \underbrace{2(x-3)^2}_{3 \text{ termes}} - \underbrace{(x-3)}_{3 \text{ termes}} &= (x-3) \left[ \underbrace{(x+1)}_{3 \text{ termes}} + \underbrace{2(x-3)}_{3 \text{ termes}} - \underbrace{1}_{3 \text{ termes}} \right] \\ &= (x-3)(x+1+2x-6-1) \\ &= (x-3) \underbrace{(3x-6)}_{3(x-2)} = \underline{3(x-3)(x-2)} \end{aligned}$$

$$\begin{aligned} \text{n) } \underbrace{(u+v)^3}_{2 \text{ termes}} - \underbrace{(u+v)^2}_{2 \text{ termes}} &= (u+v)^2 \left[ \underbrace{(u+v)}_{2 \text{ termes}} - \underbrace{1}_{2 \text{ termes}} \right] = (u+v)^2(u+v-1) \end{aligned}$$

$$\begin{aligned} \text{o) } \underbrace{2a(a-b)}_{2 \text{ termes}} - \underbrace{(a-b)^2}_{2 \text{ termes}} &= (a-b) \left[ \underbrace{2a}_{2 \text{ termes}} - \underbrace{(a-b)}_{2 \text{ termes}} \right] = (a-b)(2a-a+b) \\ &= \underline{(a-b)(a+b)} \end{aligned}$$