

Sätt in extra parentes!

2128

$$\begin{aligned} \text{(a)} \quad (x+h)^2 - (x-h)^2 &= x^2 + 2xh + h^2 - (x^2 - 2xh + h^2) \\ &= \underline{x^2} + \underline{2xh} + \underline{h^2} - \underline{x^2} + \underline{2xh} - \underline{h^2} \\ &= \underline{4xh} \end{aligned}$$

$$\text{(b)} \quad (x-h)(h-x) = \underline{x \cdot h} - \underline{x \cdot x} - \underline{h \cdot h} + \underline{hx} = \underline{2xh} - \underline{x^2} - \underline{h^2}$$

$$\begin{aligned} \text{(c)} \quad (2x+h)^2 - 2(x-h)^2 &= (2x)^2 + 2 \cdot 2x \cdot h + h^2 - 2(x^2 - 2xh + h^2) \\ &= \underline{4x^2} + \underline{4xh} + \underline{h^2} - \underline{2x^2} + \underline{4xh} - \underline{2h^2} \\ &= \underline{2x^2} + \underline{8xh} - \underline{h^2} \end{aligned}$$

$$\begin{aligned} \text{(d)} \quad (h+3)^3 &= (h+3)(h+3)^2 = (h+3)(h^2 + 6h + 9) \\ &= \underline{h^3} + \underline{6h^2} + \underline{9h} + \underline{3h^2} + \underline{18h} + \underline{27} \\ &= \underline{h^3} + \underline{9h^2} + \underline{27h} + \underline{27} \end{aligned}$$