

S 118 Nr. 4

$$a) f(x) = x^4 - 2x^3$$

$$\underline{g(x) = 2 \cdot f(x) - 1 = 2(x^4 - 2x^3) - 1 = \underline{\underline{2x^4 - 4x^3 - 1}}}$$

$$b) f(x) = x^4 - 2x^3$$

$$\underline{g(x) = -((x-1)^4 - 2(x-1)^3) = \underline{\underline{-(x-1)^4 + 2(x-1)^3}}}$$

S 118 Nr. 5

$$a) f(x) = x^3 - 2x^2 \quad g(x) = (x-a)^3 - 2(x-a)^2 + b$$

$$\underline{g(x) = (x-2)^3 - 2(x-2)^2 + 3}$$

$$b) \underline{g(x) = (x+1)^3 - 2(x+1)^2 + 4}$$

$$c) \underline{g(x) = (x+2)^3 - 2(x+2)^2 - 2}$$

$$d) \underline{g(x) = (x-1)^3 - 2(x-1)^2 + 1}$$

S 118 Nr. 6

$$f(x) = x^3 - 3x^2$$

$$a) \underline{g(x) = 0,2 \cdot f(x) = \underline{\underline{0,2 \cdot x^3 - 0,6x^2}}}$$

$$b) \underline{h(x) = f(x+1) - 3 = \underline{\underline{(x+1)^3 - 3(x+1)^2 - 3}}}$$