

$$\text{Nr. 16) a) } f'(x) = \cos(x) \Rightarrow f(x) = \sin(x)$$

$$\text{b) } f'(x) = \sin(x) + 1 \Rightarrow f(x) = -\cos(x) + x$$

$$\text{c) } f'(x) = -\sin(x) + 3x^2 \Rightarrow f(x) = \cos(x) + x^3$$

$$\text{d) } f'(x) = 2 \cdot \cos(x) - x^{-2} \Rightarrow f(x) = 2 \cdot \sin(x) + x^{-1}$$

$$\text{e) } f'(x) = 0,25 \cdot \sin(x) - 2 \cos(x)$$

$$\Rightarrow f(x) = -0,25 \cdot \cos(x) - 2 \cdot \sin(x)$$

$$\text{f) } f'(x) = \cos(x) + 0,5 x^{-\frac{1}{2}} = \cos(x) + \frac{1}{2} \cdot \frac{1}{\sqrt{x}}$$

$$\Rightarrow f(x) = \sin(x) + x^{\frac{1}{2}} = \sin(x) + \sqrt{x}$$