

## Derivace a integrace elementárních funkcí

$$y = x^n$$

$$\frac{dy}{dx} = nx^{n-1}$$

$$\int x^m dx = \frac{x^{m+1}}{m+1} + C$$

$$y = x = x^1$$

$$\frac{dy}{dx} = 1 \left( = 1x^{1-1} = x^0 \right)$$

$$\int 1 dx = x + C$$

$$y = \text{konst.}$$

$$\frac{dy}{dx} = 0$$

$$y = \sin x$$

$$\frac{dy}{dx} = \cos x$$

$$\int \cos x dx = \sin x + C$$

$$y = \cos x$$

$$\frac{dy}{dx} = -\sin x$$

$$\int \sin x dx = -\cos x + C$$

$$y = e^x$$

$$\frac{dy}{dx} = e^x$$

$$\int e^x dx = e^x + C$$