

$$c' = 0$$

$$(cu)' = cu'$$

$$(u + v - w)' = u' + v' - w'$$

$$(uv)' = u'v + v'u$$

$$\left(\frac{u}{v}\right)' = \frac{u'v - uv'}{v^2} \quad (v \neq 0)$$

$$(x^n)' = nx^{n-1} \quad (n - \text{постоянное число})$$

$$(\sin x)' = \cos x$$

$$(\cos x)' = -\sin x$$

$$(\operatorname{tg} x)' = \frac{1}{\cos^2 x}$$

$$(\operatorname{ctg} x)' = -\frac{1}{\sin^2 x}$$

$$(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$$

$$(\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$$

$$(\operatorname{arctg} x)' = \frac{1}{1+x^2}$$

$$(\operatorname{arcctg} x)' = -\frac{1}{1+x^2}$$

$$(a^x)' = a^x \ln a$$

$$(e^x)' = e^x$$

$$(\log_a x)' = \frac{1}{x \ln a} \quad (a > 0, a \neq 1; x > 0)$$

$$(\ln x)' = \frac{1}{x} \quad (x > 0)$$