**Таблица производных элементарных функций**

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| № | Функция $y=f(x)$ | Производная функции $y'=f(x)$ |
| 1 | $$C , C=const$$ | 0 |
| 2 | $$x^{n}$$ | $$n∙x^{n-1}$$ |
| 3 | $$a^{x}$$ | $$a^{x}∙lna$$ |
| 4 | $$e^{x}$$ | $$e^{x}$$ |
| 5 | $$log\_{a}x$$ | $$\frac{1}{x∙lna}$$ |
| 6 | $$lnx$$ | $$\frac{1}{x}$$ |
| 7 | $$sinx$$ | $$cosx$$ |
| 8 | $$cosx$$ | $$-sinx$$ |
| 9 | $$tgx$$ | $$\frac{1}{cos^{2}x}$$ |
| 10 | $$ctgx$$ | $$\frac{-1}{sin^{2}x}$$ |
| 11 | $$arcsinx$$ | $$\frac{1}{\sqrt{1-x^{2}}}$$ |
| 12 | $$arccosx$$ | $$\frac{-1}{\sqrt{1-x^{2}}}$$ |
| 13 | $$arctgx$$ | $$\frac{1}{1+x^{2}}$$ |
| 14 | $$arcctgx$$ | $$\frac{-1}{1+x^{2}}$$ |
| 15 | $$shx$$ | $$chx$$ |
| 16 | $$chx$$ | $$shx$$ |
| 17 | $$thx$$ | $$\frac{1}{ch^{2}x}$$ |
| 18 | $$cthx$$ | $$\frac{-1}{sh^{2}x}$$ |