**Standard Derivatives**

|  |  |
| --- | --- |
| $$y$$ | $$\frac{dy}{dx}$$ |
| $$sin(x)$$ | $$cos(x)$$ |
| $$cos(x)$$ | $$-sin(x)$$ |
| $$tan(x)$$ | $$sec^{2}(x)$$ |
| $$sec(x)$$ | $$sec(x)tan(x)$$ |
| $$cosec(x)$$ | $$-cosec(x)cot(x)$$ |
| $$cot(x)$$ | $$-cosec^{2}(x)$$ |
| $$e^{x}$$ | $$e^{x}$$ |
| $$ln(x)$$ | $$\frac{1}{x}$$ |
| $$a^{x}$$ | $$a^{x}ln(a)$$ |