Найти производную следующих функций в точке $x\_{0}$:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **№** | $$y=y(x)$$ | $$y^{'}(x)$$ | $$x\_{0}$$ | $$y^{'}(x\_{0})$$ |
|  | $$y=5$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=5x$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=4x+3$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=-6x+1$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=x^{200}$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=x^{2}+4x-2$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=6x^{3}-5x^{2}+9x-1$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=6x^{\frac{1}{3}}-5x^{\frac{6}{5}}+9x^{\frac{1}{2}}+3$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=3\sqrt{x}+\frac{5}{x}$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=5sinx$$ |  | $$x\_{0}=π$$ |  |
|  | $$y=sin5x$$ |  | $$x\_{0}=π$$ |  |
|  | $$y=5cosx$$ |  | $$x\_{0}=\frac{π}{2}$$ |  |
|  | $$y=cosx^{2}$$ |  | $$x\_{0}=0$$ |  |
|  | $$y=5sinx$$ |  | $$x\_{0}=-π$$ |  |
|  | $$y=2tg2x$$ |  | $$x\_{0}=-π$$ |  |
|  | $$y=cos^{3}x^{2}$$ |  | $$x\_{0}=0$$ |  |
|  | $$y=x∙sin5x$$ |  | $$x\_{0}=0$$ |  |
|  | $$y=x^{2}∙cos3x$$ |  | $$x\_{0}=0$$ |  |
|  | $$y=\left(3\sqrt{x}+1\right)∙\sqrt{x+5}$$ |  | $$x\_{0}=4$$ |  |
|  | $$y=\frac{2}{x}\left(\frac{4}{x}+x^{2}\right)$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=\frac{x^{2}+2}{x^{3}+3x+1}$$ |  | $$x\_{0}=1$$ |  |
|  | $$y=\frac{sin5x}{x^{3}+3x}$$ |  | $$x\_{0}=π$$ |  |