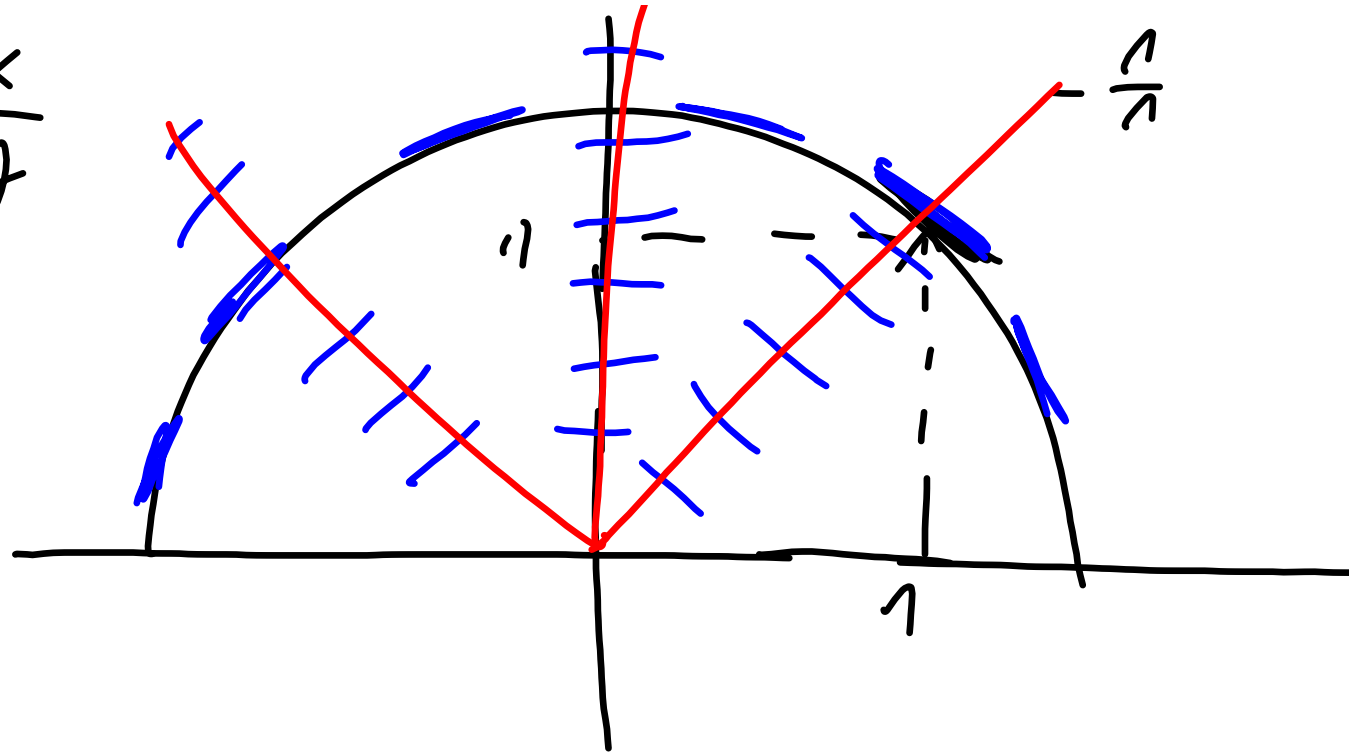
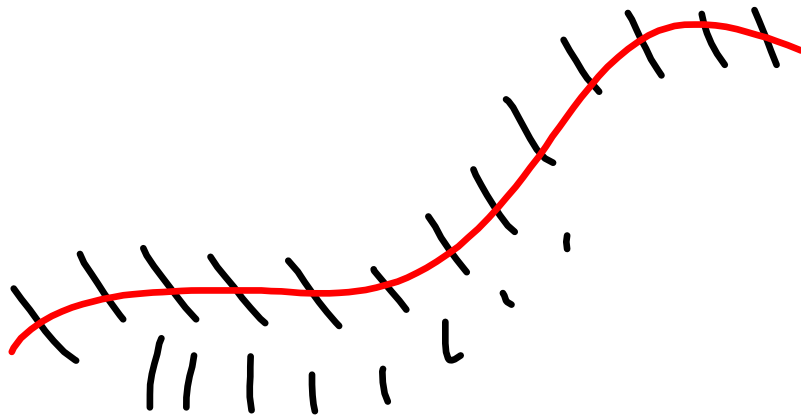


$$g' = -\frac{x}{y}$$





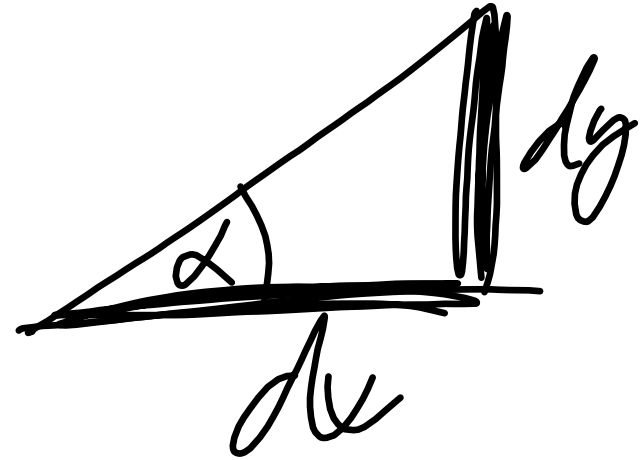
$$y' = x^2, \quad y(1) = 5$$

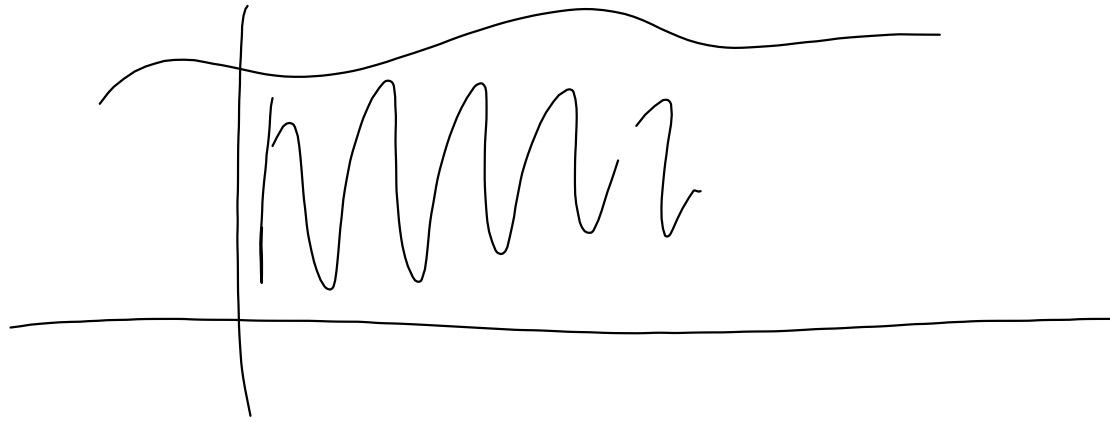
$$y = \frac{x^3}{3} + C$$

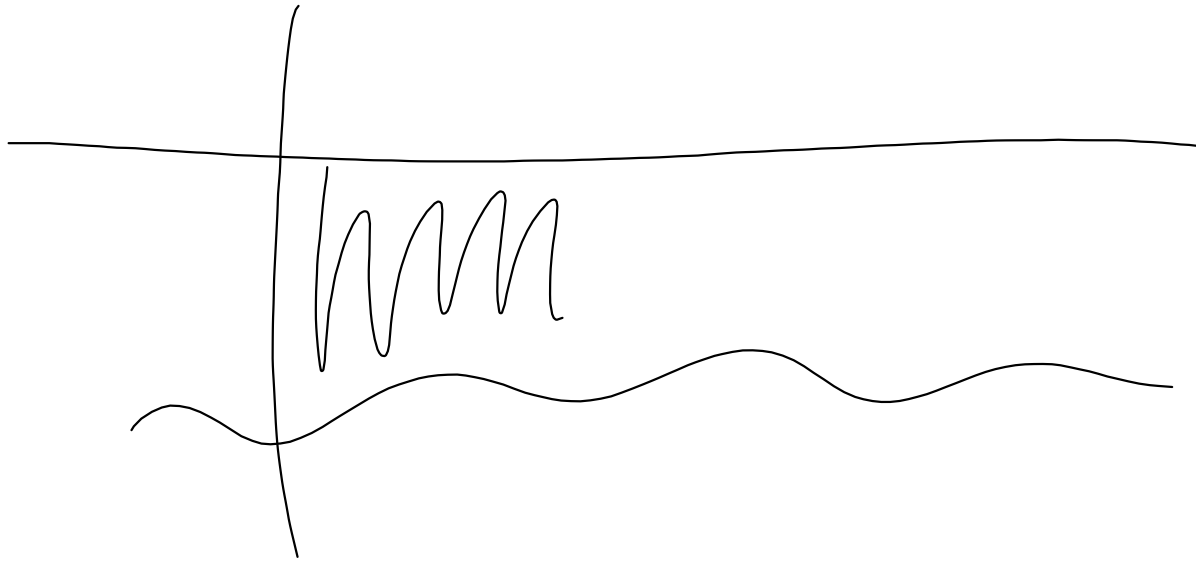
$$5 = \frac{1}{3} + C$$

$$C = 5 - \frac{1}{3}$$

$$y' = \frac{dy}{dx}$$







$$z' = \frac{x \cdot y}{e^{x+y}} = \frac{x \cdot y}{e^x \cdot e^y}$$

$$x^y = e^{\ln x^y} = e^{y \cdot \ln x}$$

$$\frac{\sin(x+y)}{\sin(x \cdot y)}$$



$$\left(\frac{x^2}{y^3}\right)'_y = x^2 \cdot (y^{-3})'_y = x^2 \cdot (-3) \cdot y^{-4}$$

$$g(y) = 0$$

$$\Rightarrow y = \dots ?$$

$$e^{a|x|+c} = e^{a|x|} \cdot e^c$$
$$=$$

$$y(10) = 1$$

$$1 = \frac{1}{1-10k}$$

$$\frac{dy}{dx} = y' = \frac{y}{x} \quad (y \neq 0)$$

$$\int \frac{1}{y} dy = \int \frac{1}{x} dx$$

$$\ln|y| = \ln|x| + C$$

$$|y| = |x| \cdot e^C$$

$$y = x \cdot K$$

$$~~K \neq 0~~$$

$$a(x) = \frac{y(x)}{x} = 1$$

$y = x$

$$v^2 + 2 = 5 + \frac{3}{v}$$

$$\frac{dv}{dx} = 3 + \frac{3}{v} = \frac{3v+3}{v}$$

$$\left( \frac{v}{3v+3} \right) dv = 1 dx$$

$$y = ax + b$$



$$y' = a(x) \cdot y$$

$$\frac{dy}{dx} = a(x) \cdot y \Rightarrow \frac{1}{y} dy = a(x) dx$$

⋮

$$N_1 - N_2 = H$$

$$N_1 = \textcircled{N_2} + H$$