

672 - Терминер:

$$f'(x) = 2x \cdot \operatorname{Arctg}(x) + (1+x^2) \cdot \frac{1}{1+x^2}$$

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

673 - Терминер:

$$y' = 2 \cdot \operatorname{Arctg}(x) \cdot \frac{1}{\sqrt{1-x^2}}$$

$$y'' = -2 \cdot \frac{1}{2} \cdot \frac{1}{\sqrt{1-x^2}} \cdot (-2x) \cdot \frac{1}{(1-x^2)} \cdot \operatorname{Arctg}(x) + \frac{2}{(1-x^2)}$$

$$y'' = \frac{2x}{\sqrt{(1-x^2)^3}} \operatorname{Arctg}(x) + \frac{2}{(1-x^2)}$$

674 - Терминер:

$$y' = a \cdot \sinh\left(\frac{x}{a}\right) \cdot \frac{1}{a} = \sinh\left(\frac{x}{a}\right)$$

$$y'' = \frac{1}{a} \cdot \cosh\left(\frac{x}{a}\right)$$

Rusdrael Antony de Araújo Freire //