

Calcolare le derivate delle seguenti funzioni reali f :

$$f(x) = \sqrt{5x+2}$$

$$f'(x) = \frac{5}{2\sqrt{5x+2}}$$

$$f(x) = \sqrt{x-6}$$

$$f'(x) = \frac{1}{2\sqrt{x-6}}$$

$$f(x) = \sqrt{x^2-3}$$

$$f'(x) = \frac{x}{\sqrt{x^2-3}}$$

$$f(x) = \sqrt{x^4-2x^3+1}$$

$$f'(x) = \frac{4x^3-6x^2}{2\sqrt{x^4-2x^3+1}}$$

$$f(x) = \sqrt{x^4-2x^3+1}$$

$$f'(x) = \frac{4x^3-6x^2}{2\sqrt{x^4-2x^3+1}}$$

$$f(x) = \sqrt{x^\pi}$$

$$f'(x) = \frac{\pi x^{\pi-1}}{2\sqrt{x^\pi}}$$

$$f(x) = \sqrt{x^{\sqrt{2}}-15}$$

$$f'(x) = \frac{x^{\sqrt{2}-1}}{\sqrt{2}\sqrt{x^{\sqrt{2}}-15}}$$

$$f(x) = \sqrt{|x|-8}$$

$$f'(x) = \frac{|x|}{2x\sqrt{|x|-8}}$$

$$f(x) = \sqrt{3^x}$$

$$f'(x) = \frac{1}{2}\sqrt{3^x} \log 3$$

$$f(x) = \sqrt{e^x}$$

$$f'(x) = \frac{\sqrt{e^x}}{2}$$

$$f(x) = \sqrt{\log x}$$

$$f'(x) = \frac{1}{2x\sqrt{\log x}}$$

$$f(x) = \sqrt{\log_6 x}$$

$$f'(x) = \frac{1}{2x\sqrt{\log_6 x} \log 6}$$

$$f(x) = \sqrt{\operatorname{sen} x}$$

$$f'(x) = \frac{\cos x}{2\sqrt{\operatorname{sen} x}}$$

$$f(x) = \sqrt{\cos x}$$

$$f'(x) = -\frac{\operatorname{sen} x}{2\sqrt{\cos x}}$$

$$f(x) = \sqrt{\operatorname{tg} x}$$

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

$$f(x) = \sqrt{\operatorname{arcsen} x}$$

$$f'(x) = \frac{1}{2\sqrt{1-x^2}\sqrt{\operatorname{arcsen} x}}$$

$$f(x) = \sqrt{\operatorname{arccos} x}$$

$$f'(x) = -\frac{1}{2\sqrt{1-x^2}\sqrt{\operatorname{arccos} x}}$$

$$f(x) = \sqrt{\operatorname{arctg} x}$$

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