

Calcolare le derivate delle seguenti funzioni:

$$1) f(x) = e^x - \log(x)$$

$$2) f(x) = \frac{x-3}{5x+8}$$

$$3) f(x) = 4x^3 - 2x^3 + 11x - 2$$

$$4) f(x) = \log(x^2 + x)$$

$$5) f(x) = \sin\left(\frac{x+1}{3x^2+41}\right)$$

$$6) f(x) = e^{x^3+10x^2}$$

$$7) f(x) = x \log(x^2 - 1)$$

$$8) f(x) = \frac{e^x + \log(x)}{\cos(x^2) - x^3}$$

$$9) f(x) = \frac{x^2 \sin(x)}{\arctan(x^2)}$$

$$10) f(x) = \frac{e^x + \log(x)}{\cos(x^2) - x^3}$$

$$11) f(x) = \log(x) \cos(x)$$

$$12) f(x) = \sqrt{x^3 - 2x^2 + x + 4}$$

$$13) f(x) = (\sin(x))^{\cos(x)}$$

$$14) f(x) = \frac{1}{\sin(x^2) + e^x}$$

$$15) f(x) = \frac{1-x \log(x)}{1-\log(x)}$$