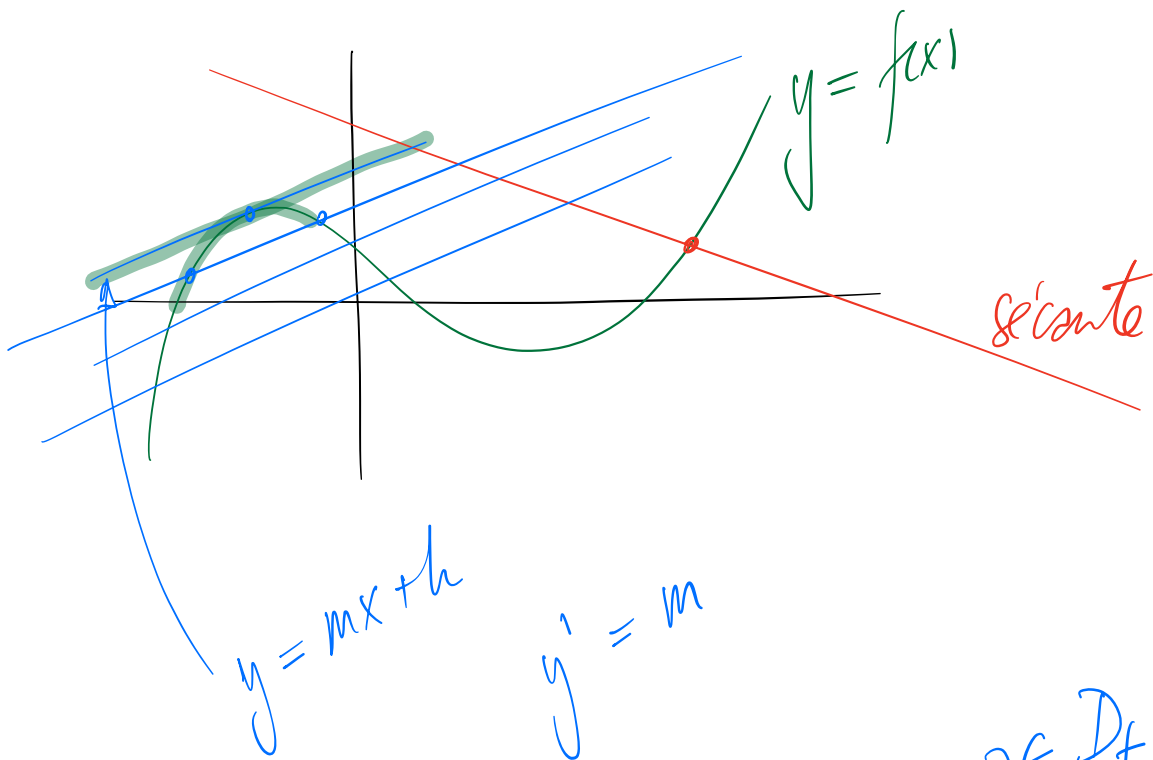


# Applications de la dérivée:

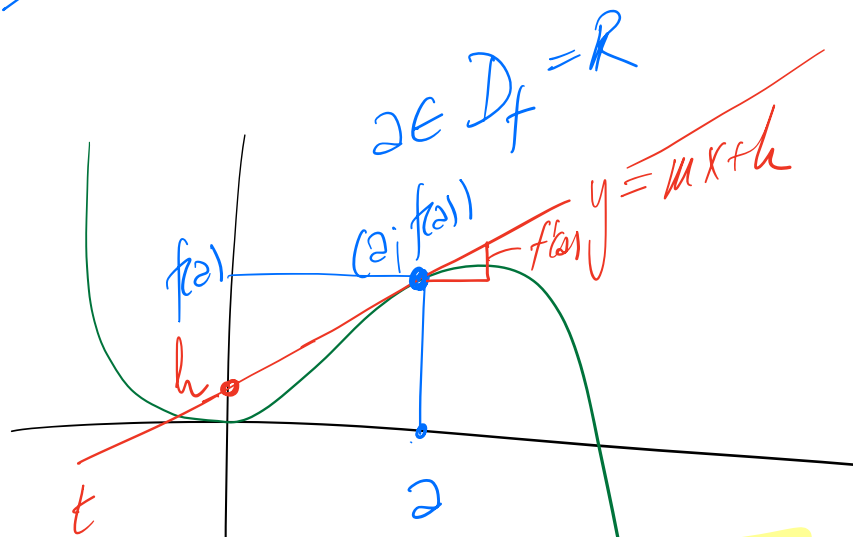


$$f(x) = 2x^2 - x^3$$

$$f'(x) = 4x - 3x^2$$

$$m = 4a - 3a^2 = f'(a)$$

$$t: y = (4a - 3a^2)x + h$$



$(a, f(a))$  est sur  $t$

$$(a, \underbrace{2a^2 - a^3}_y) \text{ sur } t$$

$$\rightarrow 2a^2 - a^3 = (4a - 3a^2)a + h$$

$$2a^2 - \cancel{a^3} - 4a^2 + \cancel{3a^3} = h$$

$$h = 2a^3 - 2a^2$$

$$t: y = (4a - 3a^2) \cdot x + 2a^3 - 2a^2 \text{ par } (a; f(a))$$

2.9.15 a' 2.9.29

$$y = f'(a) \cdot x + h \text{ par } (a; f(a))$$

$$f(a) = f'(a) \cdot a + h \Leftrightarrow h = f(a) - f'(a) \cdot a$$

$$\Rightarrow y = f'(a) \cdot x + f(a) - f'(a) \cdot a$$

$$\Leftrightarrow y = f'(a)(x-a) + f(a)$$

$$\Leftrightarrow y - f(a) = f'(a)(x-a)$$

} t par (a; f(a))  
↑  
tangente à la  
courbe