1) $f(x) = k \Longrightarrow f'(x) = 0$

2) $f(x) = x \Longrightarrow f'(x) = 1$

3) $f(x) = x^n \Longrightarrow f'(x) = nx^{n-1}$

4) $f(x) = e^x \Longrightarrow f'(x) = e^x$

5) $f(x) = e^{U(x)} \Longrightarrow f'(x) = U'(x)e^{U(x)}$

6) $f(x) = L|x| \Longrightarrow f'(x) = \frac{1}{x}$

7) $f(x) = L|U(x)| \Longrightarrow f'(x) = \frac{U'(x)}{U(x)}$

8) $f(x) = \sin(x) \Longrightarrow f'(x) = \cos(x)$

9) $f(x) = \sin(U(x)) \Longrightarrow f'(x) = U'(x)\cos(U(x))$

10) $f(x) = \cos(x) \Longrightarrow f'(x) = -sen(x)$

11) $f(x) = \cos(U(x)) \Longrightarrow f'(x) = -U'(x)\text{sen}(U(x))$

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

13) $f(x) = \sqrt{U(x)} \Longrightarrow f'(x) = \frac{U'(x)}{2\sqrt{U(x)}}$

14) $f(x) = tg(x) \Longrightarrow f'(x) = \frac{1}{cos^2(x)}$

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

16) $f(x) = arctg(U(x)) \Longrightarrow f'(x) = \frac{U'(x)}{U^2(x)+1}$

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

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

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

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

Álgebra de Derivadas

- **Suma y/o resta**

$$f(x) = U(x) \pm V(x) \Longrightarrow f'(x) = U'(x) \pm V'(x)$$

- **Multiplicación**

$$f(x) = U(x)V(x) \Longrightarrow f'(x) = U'(x)V(x) + U(x)V'(x)$$

- **División**

$$f(x) = \frac{U(x)}{V(x)} \Longrightarrow f'(x) = \frac{U'(x)V(x) - U(x)V'(x)}{V^2(x)}$$

- **REGLA DE LA CADENA**

$$h(x) = f(g(x)) \Longrightarrow h'(x) = f'\big(g(x)\big) \times g'(x)$$