$$1.C' = 0$$

$$2.x' = 1$$

$$3.\left(\sqrt{x}\right)' = \frac{1}{2\sqrt{x}}$$

$$4.\left(a^x\right)' = a^x \ln a$$

$$5.\left(x^\alpha\right)' = \alpha \cdot x^{\alpha-1}, x \in R$$

$$6.(e^x)' = e^x$$

$$7.\left(\log_a x\right)' = \frac{1}{x \cdot \ln a}$$

$$8.\left(\ln x\right)' = \frac{1}{x}$$

$$9.(\sin x)' = \cos x$$

$$10.(\cos x)' = -\sin x$$

$$11.\left(tgx\right)' = \frac{1}{\cos^2 x}$$

$$12.(ctg\ x)' = -\frac{1}{\sin^2 x}$$

$$13.(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$$

$$14.(\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$$

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

$$16.\left(arcctg\ x\right)' = -\frac{1}{1+x^2}$$

$$17.\left(sh\,x\right)' = ch\,x$$

$$18.(ch\,x)' = sh\,x$$

$$19.(th\,x)' = \frac{1}{ch^2 x}$$

$$20.(cth\,x)' = -\frac{1}{sh^2 x}$$