**Prof : Fanidi Rachid**

**Tableau des fonctions primitives**

**Lycée al Massira EL Khadraa**

**Tiznit**

**Niveau : 2BAC SP-SVT BIOF**

|  |  |  |  |
| --- | --- | --- | --- |
| **La fonction f** | **La primitive F**  | **La fonction** $f$ | **La primitive** $F$ |
| $$a$$ | $$ax$$ | $$u^{'}+v^{'}$$ | $$u+v$$ |
| $$x$$ | $$\frac{1}{2}x^{2}$$ | $$u^{'}v+uv^{'}$$ | $$uv$$ |
| $$ x^{n} ;n\in N$$ | $$\frac{1}{n+1}x^{n+1}$$ | $$\frac{u^{'}v-uv^{'}}{v^{2}}$$ | $$\frac{u}{v}$$ |
| $$\frac{1}{x^{2}}$$ | $$\frac{-1}{x}$$ | $$u^{'}\left(v\right)v^{'}$$ | $$uov$$ |
| $$\frac{1}{x^{n}};n\in N-\left\{1\right\}$$ | $$\frac{-1}{(n-1)x^{n-1}}$$ | $$u^{'}.u^{n}$$ | $$\frac{1}{n+1}u^{n+1}$$ |
| $$\frac{1}{\sqrt{x}}$$ | $$2\sqrt{x}$$ | $$\frac{u^{'}}{\sqrt{u}}$$ | $$2\sqrt{u}$$ |
| $$x^{r};r\in Q-\left\{-1\right\}$$ | $$\frac{1}{r+1}x^{r+1}$$ | $$\frac{u^{'}}{u^{2}}$$ | $$\frac{-1}{u}$$ |
| $$cosx$$ | $$sinx$$ | $$\frac{u^{'}}{u^{n}}$$ | $$\frac{-1}{(n-1)u^{n-1}}$$ |
| $$sinx$$ | $$-cosx$$ | $$\frac{u^{'}}{u}$$ | $$ln\left|u\right|$$ |
| $$tanx$$ | $$\frac{1}{cos^{2}x}=1+tan^{2}x$$ | $$u^{'}e^{u}$$ | $$e^{u}$$ |
| $$cos(ax+b)$$ | $$\frac{1}{a}sin(ax+b)$$ | $$e^{x}$$ | $$e^{x}$$ |
| $$sin(ax+b)$$ | $$\frac{-1}{a}cos(ax+b)$$ | $$e^{ax}$$ | $$\frac{1}{a}e^{ax}$$ |
| $$\frac{1}{x}$$ | $$lnx$$ | $$\frac{1}{ax+b}$$ | $$\frac{1}{a}ln(ax+b)$$ |