**First year (2023-2024) Mathematics- Statistics**

**Exercices (Derivation and integration )**

**Exercice 01 Study the continuity of the following function :**

* **.**

**Exercice 02**

* **Study the derivability on 0 of the following functions :**

1. **.**
2. **.**
3. **.**

* **Let the function be defined as**
* **Is the function derivable on**

**Exercice 03**

* **Calculate the following primitives ( Use the integration by parts):**

1. **.**
2. **then .**

* **Calculate the following primitives ( Use the change of variable):**

**Exercice 04**

**Calculate the following integrations :**

1. **,**
2. **and ,**