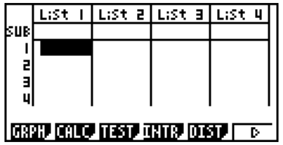
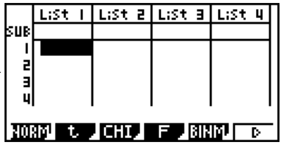
Soit $\mathcal{X}$ une variable aléatoire suivant une loi normale centrée et réduite $(\mathcal{X} \sim \mathcal{N}(0\,;\,1))$.

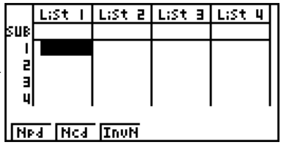
# A. Les fonctions de la loi normale :

Les fonctions liées à la loi normale :

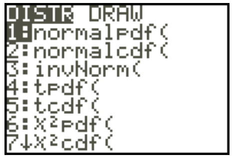
- **Pour les Casio :** dans le mode Stat ⇝ DIST ⇝ NORM







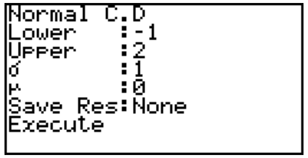

- **Pour les Texas Instruments :**

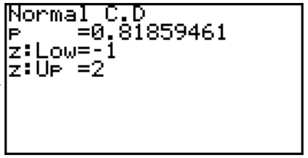


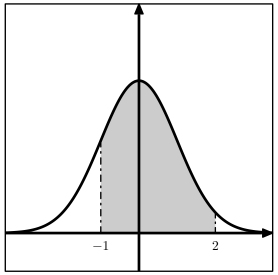

# B. $\mathcal{P}(x \leqslant \mathcal{X} \leqslant x')$ :

Déterminons la valeur de $\mathcal{P}(-1 \leqslant \mathcal{X} \leqslant 2)$ :

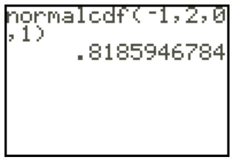
- Pour les Casio :





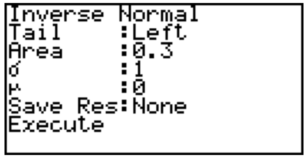

- Pour les Texas Instruments :

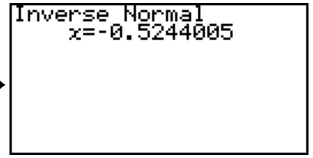


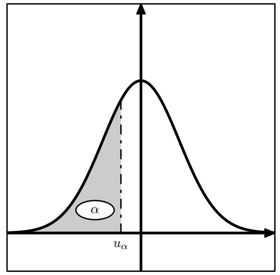

# C. $\mathcal{P}(\mathcal{X} \leqslant u_\alpha) = \alpha$ :

Déterminons la valeur de $u_\alpha$ tel que $\mathcal{P}(\mathcal{X} \leqslant u_\alpha) = 0{,}3$

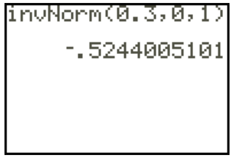
- Pour les Casio :





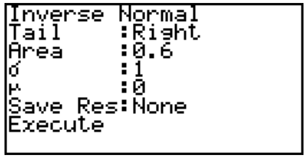



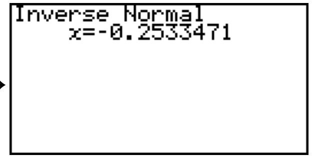

- Pour les Texas Instruments :

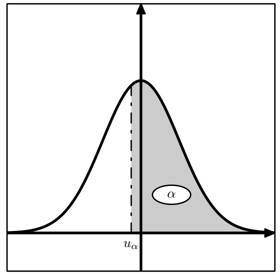



# D. $\mathcal{P}(\mathcal{X} \geqslant u_\alpha) = \alpha$ :

- Pour les Casio :






# E. $\mathcal{P}(-u_\alpha \leqslant \mathcal{X} \leqslant u_\alpha) = \alpha$ :

- Pour les Casio :