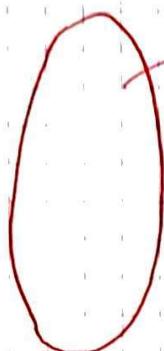


### Exemple 1 :



$$\mu = 13$$

$$\sigma = 3$$

population

échantillon

$$m = 20$$

$$\sigma = ?$$

$$\delta = ?$$

$$m = \mu = 13$$

$$\delta = \frac{\sigma}{\sqrt{m}} = \frac{3}{\sqrt{20}} \approx 2,91$$

$\bar{x}$  : moyenne d'un échantillon d'étudiant-es. ( $N(13; 2,91)$ )

$$\begin{aligned}
 P(\bar{x} > 11) &= P\left(\frac{\bar{x} - m}{\delta} > \frac{11 - 13}{2,91}\right) \quad (Y = \frac{\bar{x} - m}{\delta}) \\
 &= P(Y > \frac{-2}{2,91}) \\
 &= P(Y > -0,687) \\
 &= P(Y < 0,687) \\
 &= \pi(0,687) \\
 &= 0,753
 \end{aligned}$$