

$$\begin{aligned} P\left(X < \frac{\theta}{2}\right) &= F_X\left(\frac{\theta}{2}\right) \\ &= \int_{-\infty}^{\theta/2} f_X(x) dx = \int_0^{\theta/2} \frac{2x}{\theta^2} dx \\ &= \frac{2}{\theta^2} \int_0^{\theta/2} x dx = \frac{2}{\theta^2} \left[ \frac{x^2}{2} \right]_0^{\theta/2} \\ &= \frac{2}{\theta^2} \frac{\theta^2}{8} = \frac{1}{4} \end{aligned}$$

Calculate  $F_X(H) \Rightarrow$  Remplacer  $t$