Test correction

[Uniform Distribution](https://en.wikipedia.org/wiki/Uniform_distribution_(continuous))

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| \start{equation}  \int\_0^b cdx = 1  f(x)=\begin{cases}  \frac{1}{b}, & \text{if $0<=1/b<=b$}.\\  0, & \text{otherwise}. \end{cases}  F(x)=\begin{cases}  0, & \text{if $0<=1/b<=b$}.\\  \frac{x}{b}, & \text{if $0<=x<=b$}.\\  1, & \text{otherwise}. \end{cases}  F(x)=\int\_-\inf^x f(t)dt  \end{equation} |
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| \start{equation}  E(X)=\int\_-\inf^\inf x\f(x)dx = \int\_0^b \frac{1}{b}xdx = \frac{1}{b}\[\frac{x^2}{2}\] \text{from 0 to b} = \frac{b}{2}  \end{equation} |

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| \start{align\*}  Var(X) = & \int\_-\inf^\inf (x-\frac{b}{2})^2 f(x)dx \\  = & E(X^2)-E(X)  = & \frac{b^2}{12}  \end{align\*} |