$$y = mx + b$$

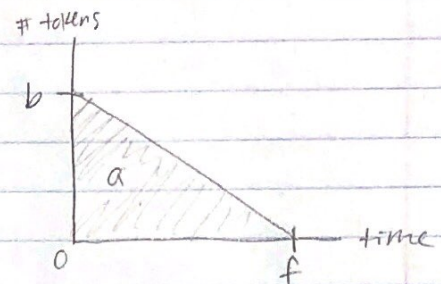# Profit Sharing Token Distributor – Linear

Variables:
$f \rightarrow$ time given to complete emission
$a \rightarrow$ token allotment
$b \rightarrow$ initial amount to emit
$m \rightarrow$ slope of distribution

Configurable variables:
- a
- f
- m or b

$$a = \int_0^f mt + b \, dt$$

$$a = \frac{mt^2}{2} + bt \Big]_0^f$$

$$a = \frac{mf^2}{2} + bf$$

If user sets initial amount to emit (b):	If user sets slope of distribution (m):
$a - bf = \frac{mf^2}{2}$	$a - \frac{mf^2}{2} = bf$
$2(a - bf) = mf^2$	$b = \dfrac{a - \frac{mf^2}{2}}{f} = \boxed{\dfrac{2a - mf^2}{2f}}$
$\boxed{m = \dfrac{2(a - bf)}{f^2}}$	