Let $p$ be a probability between 0 and 1, let $E(SS)/d$ be a constant, let $d$ be a number of years.

I would be grateful if you could explain how to go from the first equation below to the last equation below.

$$CF\_{t}=\frac{E\left(SS\right)}{d}\left(1-p\right)^{t}+α\frac{E\left(SS\right)}{d}(1-\left(1-p\right)^{t})$$

$$\sum\_{t=1}^{d}CF\_{t}=\left(1-p\right)\frac{E\left(SS\right)}{d} \frac{1-\left(1-p\right)^{d}}{p}\left(1-α\right)+αE\left(SS\right)$$

$$=E\left(SS\right).\frac{1}{d}\left[dα+\left(1-α\right)\left(1-p\right)\frac{\left(1-\left(1-p\right)^{d}\right)}{p}\right]$$