0.55

$\frac{0.6-0.55}{0.55} = \frac{0.05}{0.55} = 9\%$

$\frac{0.6-0.53}{0.53}$

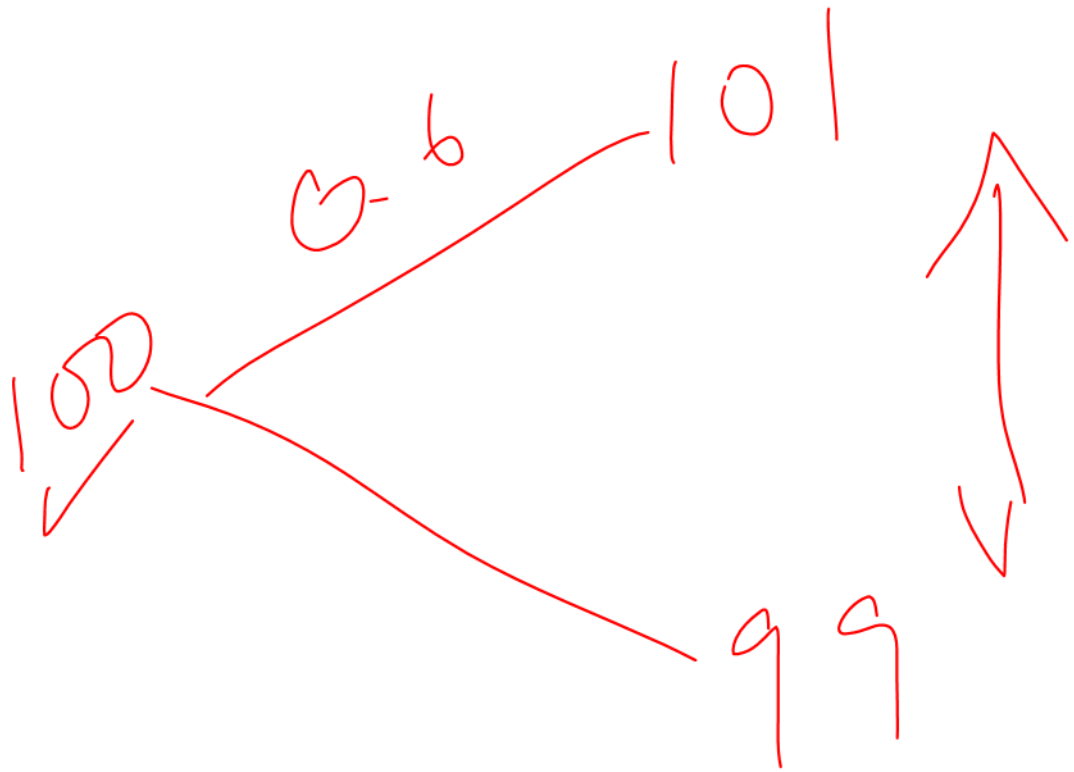
$V = 0.5$

0.05

0.52

0.03

0.5


0.6
101
100
99

Replication

$-\frac{99}{2} \times \text{Cash} + \frac{1}{2} \times \text{Stock}$

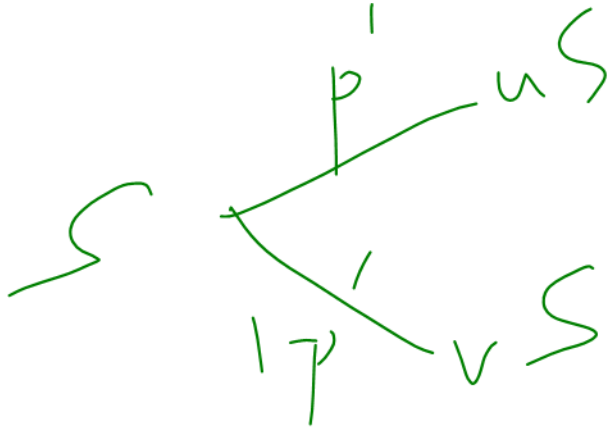
$-\frac{99}{2}$ → -99, $-\frac{99}{2}$

$\frac{101}{2}$ → $\frac{100}{2}$, $\frac{99}{2}$

$\frac{101-99}{2} = 1$

$\frac{1}{2} = \frac{100-99}{2}$

$\frac{99-98}{2} = 0$



$$1+r\delta-\delta = \frac{1}{1+\delta}\left(p'uS+(1-p')vS\right)$$

$$1+r\delta-v = p'(u-v)$$

$$p' = \frac{1+\delta-v+r\delta}{u-v}$$

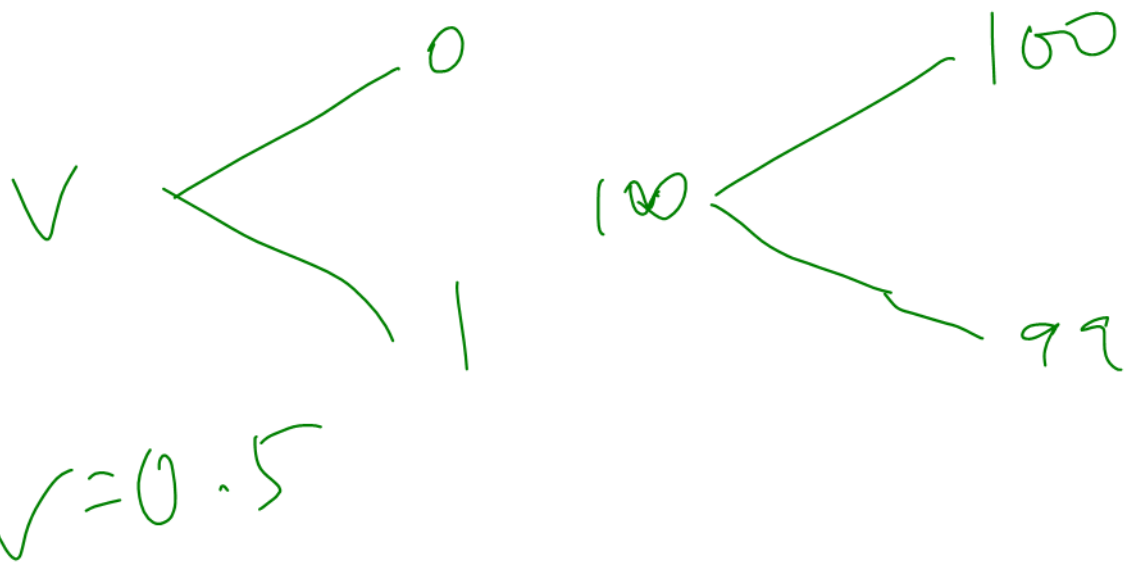
ASSUME

$\Omega = \frac{\mu}{s}$

$z = \frac{v^2}{s^2} = \frac{4\pi^2}{s^2}$

$\frac{r^2}{T^2} = z$

$\Omega \neq \frac{\mu}{s}$



$V = 0.5$