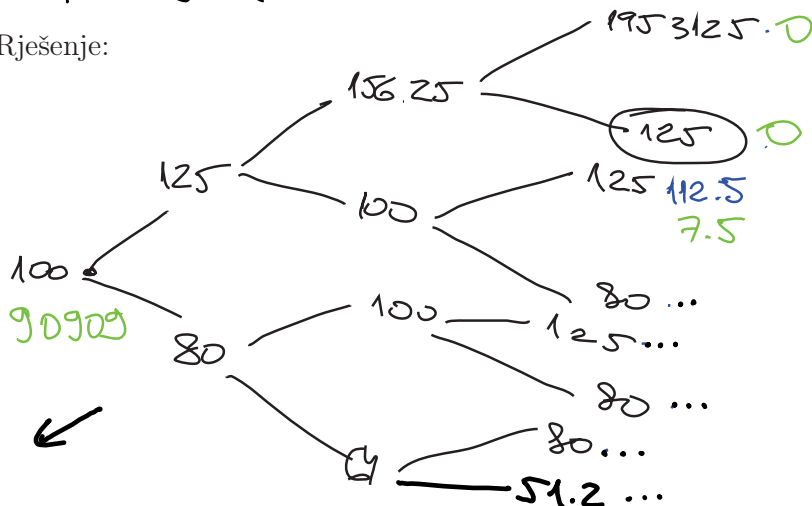


$$p^* = \frac{r-a}{b-a} = \frac{2}{3}$$

Rješenje:

binarno
stablo

dovršiti
za D_t



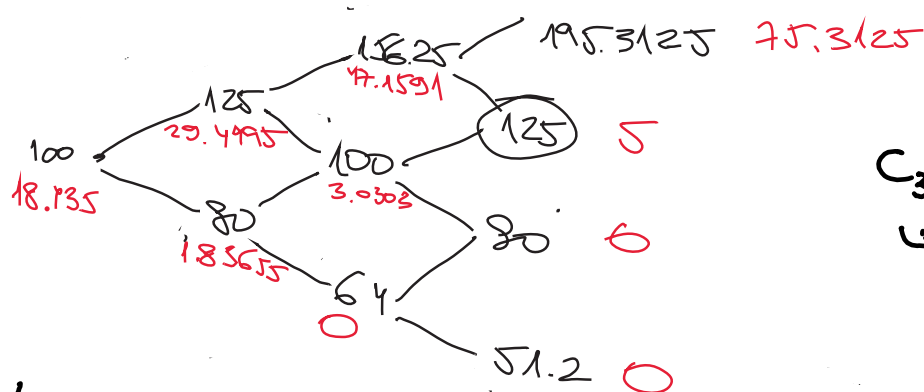
$$D = (K - A_T)^+$$

→ ovise o svim
vrijednostima

S_1, S_2, S_3

$$D_3 = (120 - A_3)^+$$

— A_3
— D_t



$$C_3 = (S_3 - 120)^+$$

→ ovise samo o S_3

→ koristimo rekombinirano stablo

(istu proceduru možemo provesti za određivanje D_t
 $t=1,2,3$ u svim čvorovima punog binarnog stabla)

iterativna formula za C_t (unatrag):

$$C_t = E^* \left[\frac{C_{t+1}}{1+r} \mid F_t \right] = E^* \left[\frac{c(t+1, S_t(1+X_{t+1}))}{1+r} \mid F_t \right]$$

$$= \frac{c(t+1, S_t(1+b))}{1+r} \cdot p^* + \frac{c(t+1, S_t(1+a))}{1+r} (1-p^*)$$

$$= \frac{C_{t+1}^{\uparrow}}{1+r} p^* + \frac{C_{t+1}^{\downarrow}}{1+r} (1-p^*)$$

↑ D_{t+1} ↑ C_{t+1} ↓ C_{t+1}

↑ C_{t+1} ↓ C_{t+1}

↑ D_{t+1} ↓ C_{t+1}

↑ C_{t+1} ↓ C_{t+1}

↑ D_{t+1} ↓ C_{t+1}

• u čvoru $\{S_2 = 156.25\}$:

$$C_2 = \frac{75.3125}{1.1} \cdot \frac{2}{3} + \frac{5}{1.1} \cdot \frac{1}{3} = 47.1591$$