

Hw4 Task 4

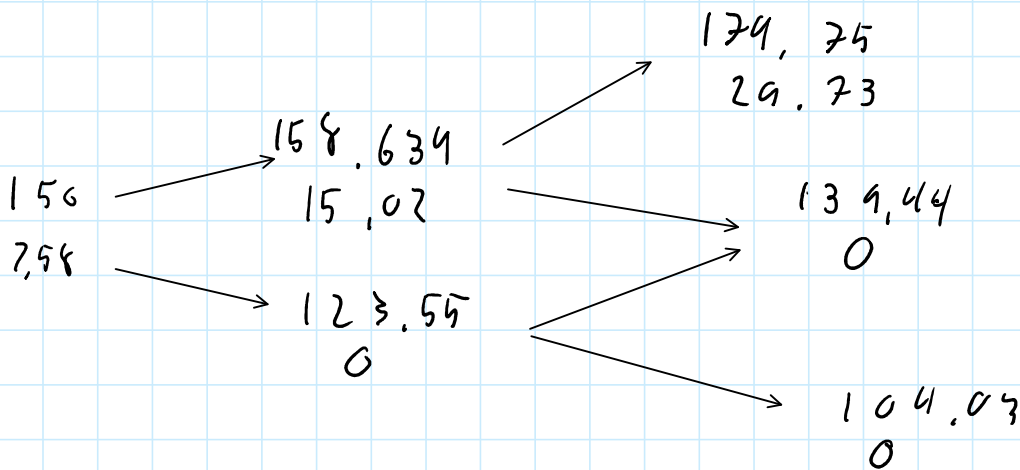
Friday, October 11, 2024 11:49 AM

calculate delta, call:

$$\Delta = \frac{C_u - C_d}{S_u - S_d}$$

$$r_u = e^{-0,04 \cdot 0,25} (0,51 \cdot 24,75) = 15,02$$

$$r_d = 0$$



$$\Delta_1 = \frac{15,02 - 0}{158,634 - 123,55} = 0,43$$

$$\text{Shares needed} = 0,43 \cdot 10000 = 4300$$

$$\Delta_2 = \frac{29,74 - 0}{174,75 - 139,44} = 0,75$$

$$\text{Shares needed} = 0,75 \cdot 10000 = 7500$$

$$\text{Stock moving down} = \Delta_{down} = 0$$

$$\text{stock moving down} = D_{\text{down}} \frac{\sigma}{S_d - S_u} = 0$$

$$\text{stocks needed} = 0$$