Problem 2

Friday, October 4, 2024 10:35 AM

T : 0,5 years
strike : \$30
EU call : \$2
Stock price : \$29
Dividend : \$0,50 (2 and 5 months)
rfr : 10% per annum

Put call Parity :

$$C + D + Ke^{-rt} = p + S_0$$

$$\Rightarrow p = C + D_0 + Ke^{-rt} - S_0$$

$$= 2 + (0{,}5e^{-0{,}1 \cdot \frac{1}{6}} + 0{,}5e^{-0{,}1 \cdot \frac{5}{12}}) + 30e^{-0{,}1 \cdot 0{,}5} - 29$$

$$\simeq \$2{,}51$$