Assignment 2.2

Spot price	Profit/Loss
1400	$ 650000
1500	$ 550000
1560	$ 490000
1600	$ 450000
1800	$ 250000
2050	$ 0
2200	- $ 150000
2300	- $ 250000
2400	- $ 350000

Profit = (1.6 − 1.4) × 37500

= $\boxed{\$7500}$ day

Short

Loss = (7800 − 7500) 40 under point

= $\boxed{12000 \text{ points}}$

6) $\text{Call} - \text{Put} = \text{Stock} - \text{Strike}\, e^{-rT}$

Call = \$20

Put = \$5

Stock = \$130

Strike = \$120

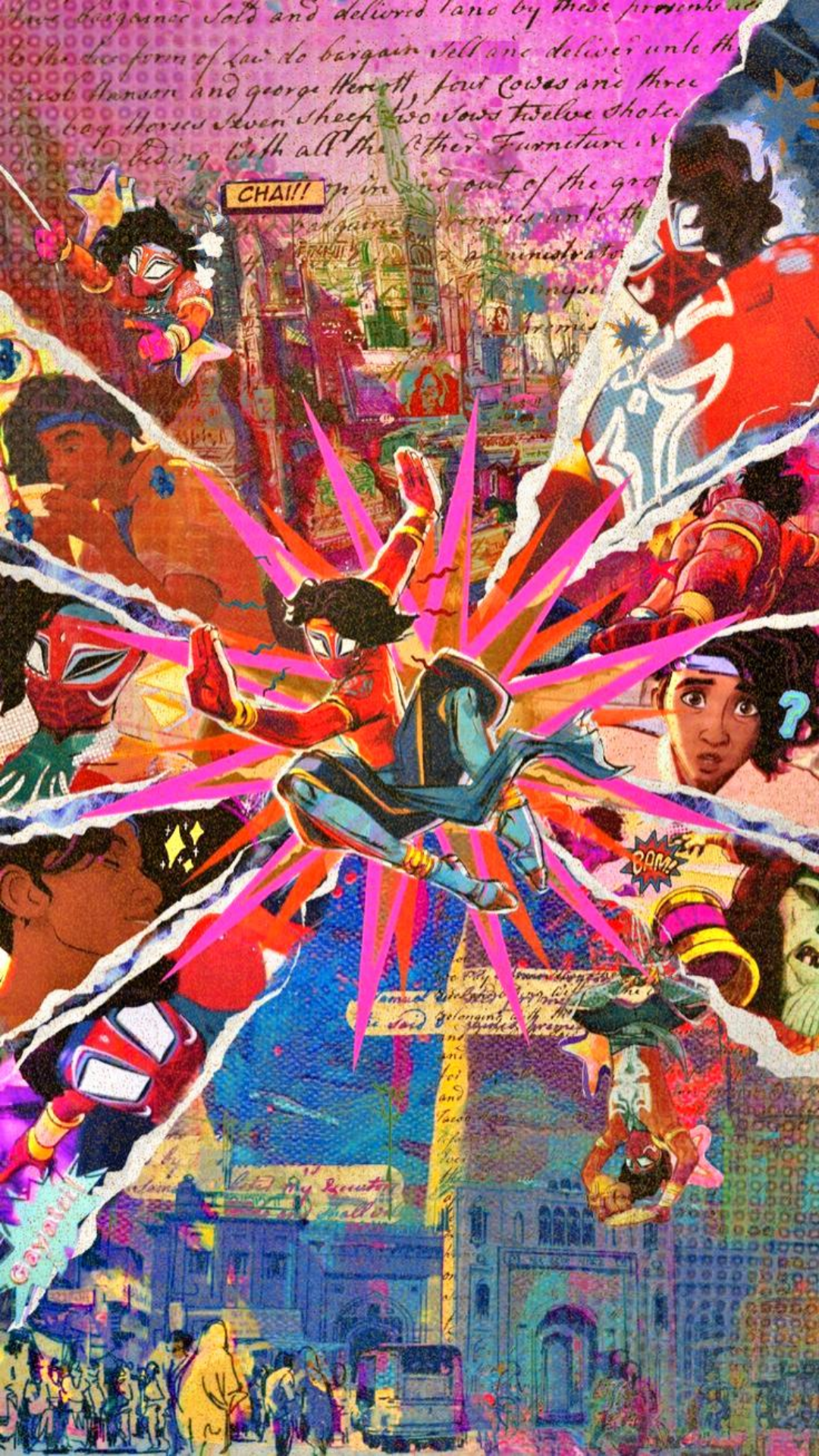
$r = ?$, $T = 1$ year

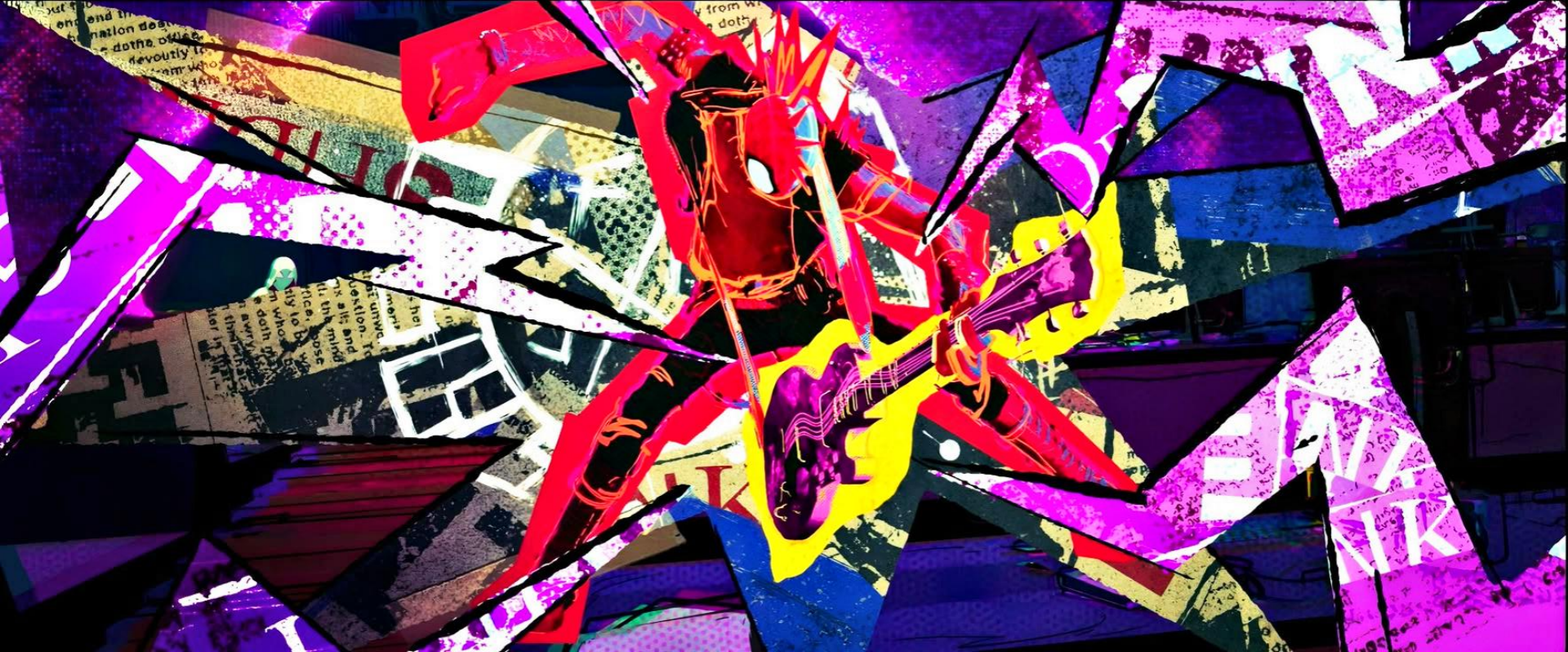
$20 - 5 = 130 - 120e^{-r}$

$+115 \quad \cdot e^{-r}$

120

eqz to $\boxed{r = 4.26\%}$


CHAI!!
BAM!
?
Gayatri!



5. terminal value = $(S_T - F_0) + \max(F_0 - S_T, 0)$

↑ Long forward ↑ Long put

Case 1: $S_T > F_0$

$TV = S_T - F_0$

Case 2: $S_T < F_0$

$TV = S_T - F_0 + F_0 - S_T = 0$

$$\therefore TV = \begin{cases} S_T - F_0 & \text{if } S_T \geq F_0 \\ 0 & \text{if } S_T < F_0 \end{cases} = \max(S_T - F_0, 0)$$

↓ long call.

$\therefore$ Put price = call price