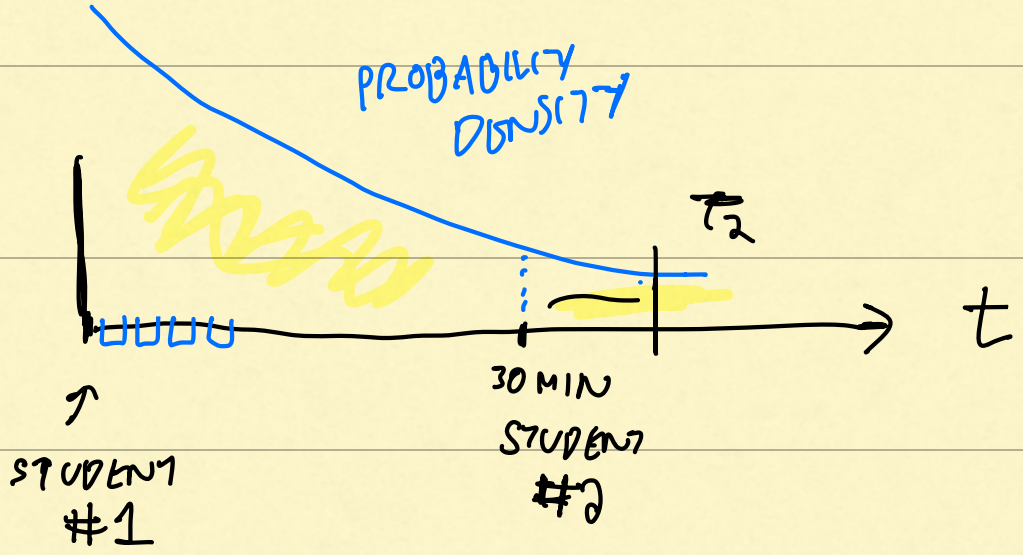
PS 4



$$E[T_2] \stackrel{?}{=} 0 \text{ MIN}$$

PARTITION: $T_1 > 30$ MIN

$T_1 \leq 30$ MIN

$\frac{1}{e} \approx 0.34$

$$E[T_2] = E[T_2 \mid T_1 > 30 \text{ MIN}] \cdot \mathbb{P}(T_1 > 30 \text{ MIN})$$

$1 - \frac{1}{e} \approx 0.66$

$$+ E[T_2 \mid T \leq 30 \text{ MIN}] \cdot \mathbb{P}(T_1 \leq 30 \text{ MIN})$$

0

$= 11$ MIN ✓✓

$$E[T^n] = \int_S t^n p_T(t)\,dt$$

B.