HW 9

Monday, November 7, 2022   11:59 PM

① 8-core system

$$\text{Target-speed-up} = \cfrac{1}{FSR + \cfrac{FSP}{\#cores}}$$

$$= \frac{1}{(1-0.8) + \frac{0.8}{8}} = \frac{1}{0.3}$$

Speed up = 3.33

② $4 = (1-p) \times 1 + p \times 200$

$\Rightarrow 3 = 199p$

$\Rightarrow p = 0.01507$

$\Rightarrow \boxed{p = 1.5\%}$

only take 1.5% remote access to nullify speedup of DMR.