

If F or any instance X , $\alpha \cdot \text{ALG}(X) \geq \text{OPT}(X)$.

Then ALG is α -approx.

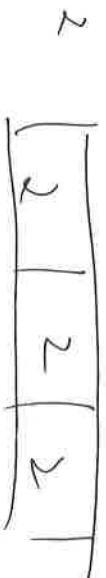
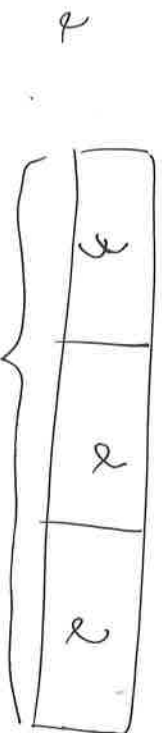
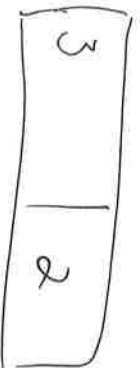
The ^{tight} approx. ratio of an alg. is

$$\frac{\text{OPT}(X)}{\text{ALG}(X)}$$

max
X

For minimization, $\forall X$, $\text{ALG}(X) \leq \text{OPT}(X) \cdot \alpha$
 then ALG is α -approx.

3, 3, 2, 2, 2



3, 2, 2, 3, 2

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