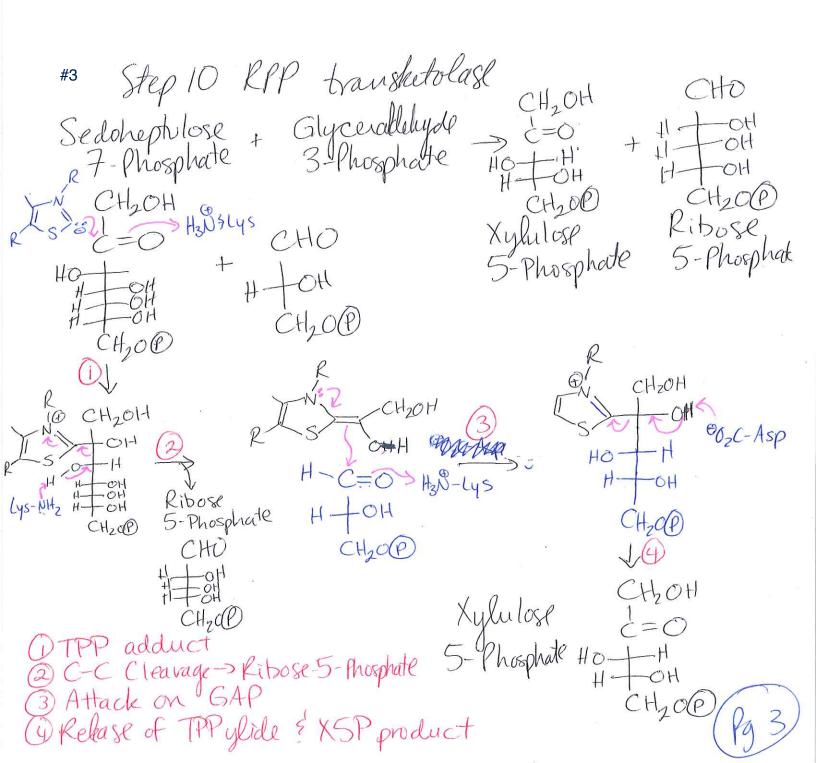
mechanism for CA cycle, Step #1 HSCOA (OA Han-Lys etoglutarate Succinyl CoA as nuc utilizes co2 brees in notes) 020 rentation CO2 OH OH COL oA Jucciny TPP Addition to a-Ketoglutarate by TPP yeid Decarboxylation Rxn w/ lipoamide @ Elimination of TPP ylide Transesterification w/ Coenzyme A (HSGA) Rxn w/ lipoamide

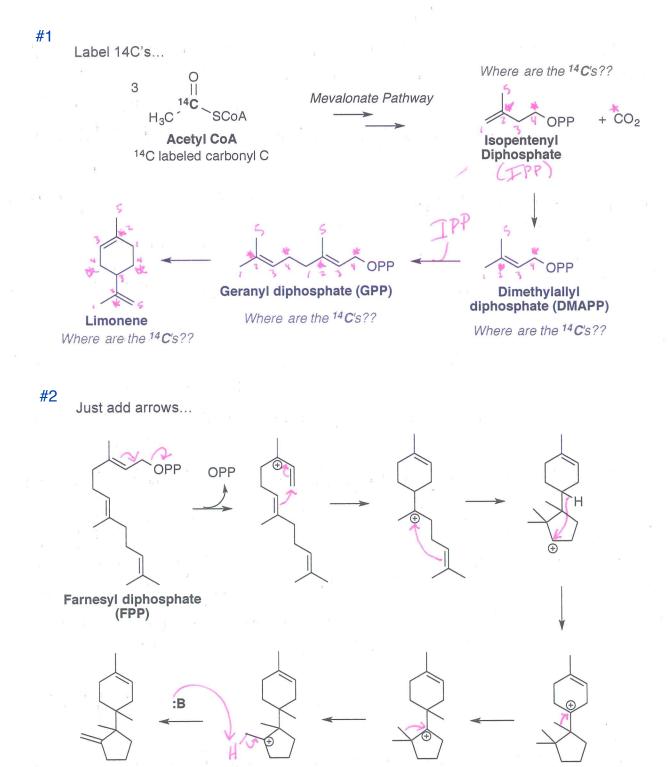
N-H bonds should be drawn out to show protonation by lysine

Step 7 RPP, transketolase-catized rxn #2 CH2OH CH, OH 30-lys 1HO CHO 2/=0 > HOIL-H H-H-OH ICH200 H-\$-OH CH20 -OF Xypulose 6CH200 Erythrose 4-phosphate Glyceraldehyde 3-phosphate (GAP) 5-phosphate Fructose-lephosphate J.TPP add SCHO (2) release 2/CH20H CH20H OH CH200 Erythrose-4-Phosphat cleavage HZCO  $CH_{2}OH$  C=O H + OH H + OHrelease Xylulose 5-Phosphage 9Ctl20 CH200

## N-H bonds should be drawn out to show protonation with lysine

## N-H bonds should be drawn out to show protonation with lysine





Trichodiene

#3 Propose a mechanism...

