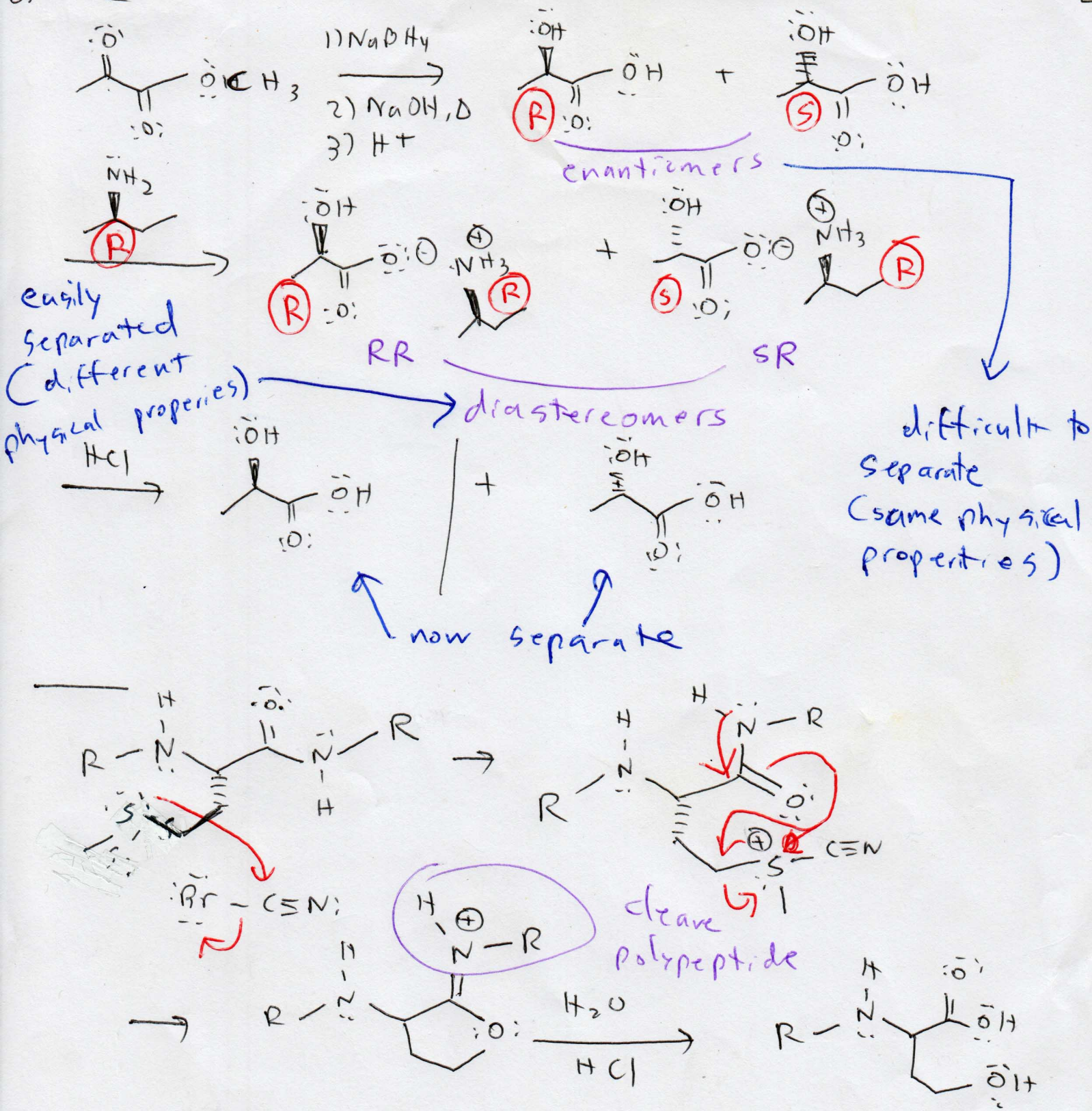
1) NaBH4
2) NaOH, Δ
3) H+
enantiomers
easily separated (different physical properties)
RR
SR
diastereomers
HCl
difficult to separate (same physical properties)
now separate
cleave polypeptide
H2O
HCl

Final

Carboxylic acids + derivatives
- Relative reactivity of carbonyl compounds
- acidic vs basic ~~chem~~ mechanisms of carbonyls (enolates)
- esterifaction / hydrolysis (cationic)
- saponification (anionic), diazomethane
- reversibility
- how to make esters + amides ($SOCl_2$)
- alkylation + reduction → DIBAL-H; "other" $LiAlH_4$ vs $NaBH_4$
- lactones + lactams

Types of problems: mechanism, synthesis, fill-in-the-blank

- nitriles
- transesterification

Enolates
- pKa's
- α-halogenation (including halo.form)
- aldol, mixed aldol, Claisen, Dieckmann, Michael, Robinson, Stork, α-alkylation

When given a product, which rxn was used to make it.

- Malonic ester synthesis

Amines

"9" ways to make an amine, including the Curtius + Hofmann rearrangements

acid/base properties of amines

Gabriel synthesis

5/9/12 → stability of carbonates + carbamic acids

No IR problems

Carbohydrates + Amino Acids