

Student name:

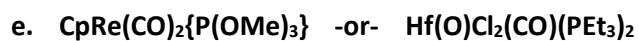
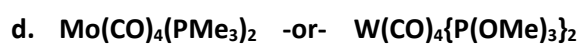
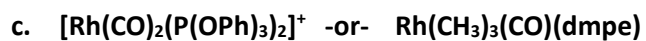
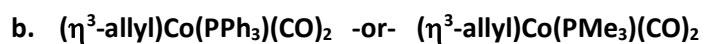
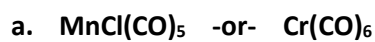
Student ID:

CHEM.524

Homework 2

1st semester 1445

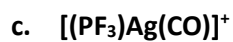
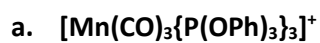
1. For each of the following pairs of metal complexes, which should have the highest average carbonyl IR stretching frequency.



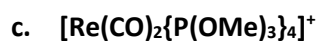
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2. Which of the following complexes will have the *highest* ν_{CO} stretching frequency in the IR? Why?



3. Which of the following complexes will have the *lowest* ν_{CO} stretching frequency in the IR? Why?



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4. Which of the following pairs of metal hydrides is the most acidic (lowest pK_a)?

