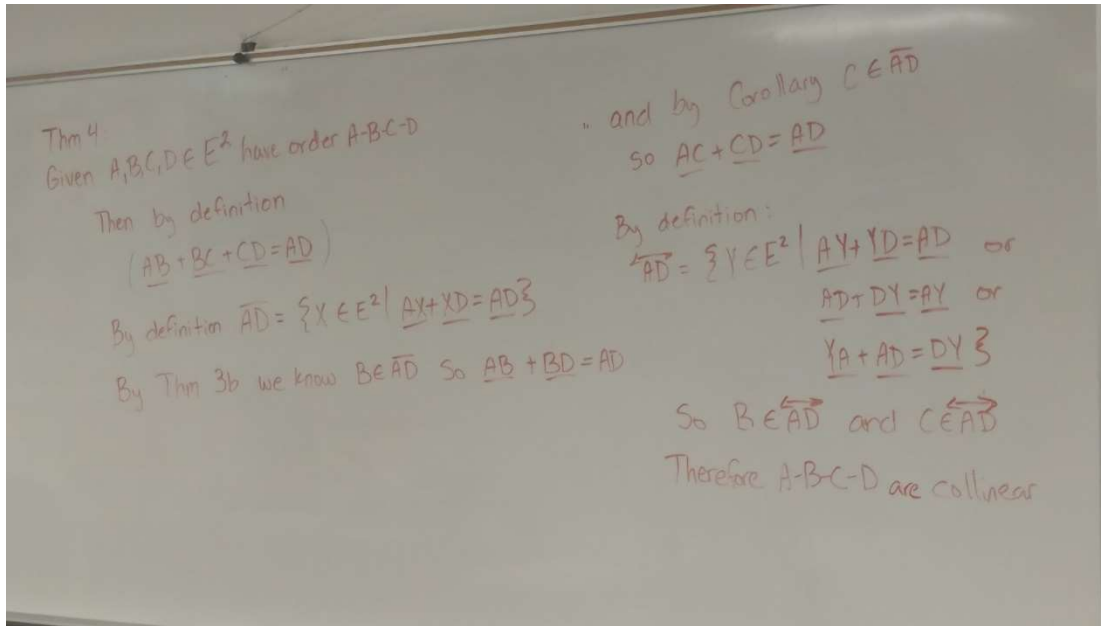
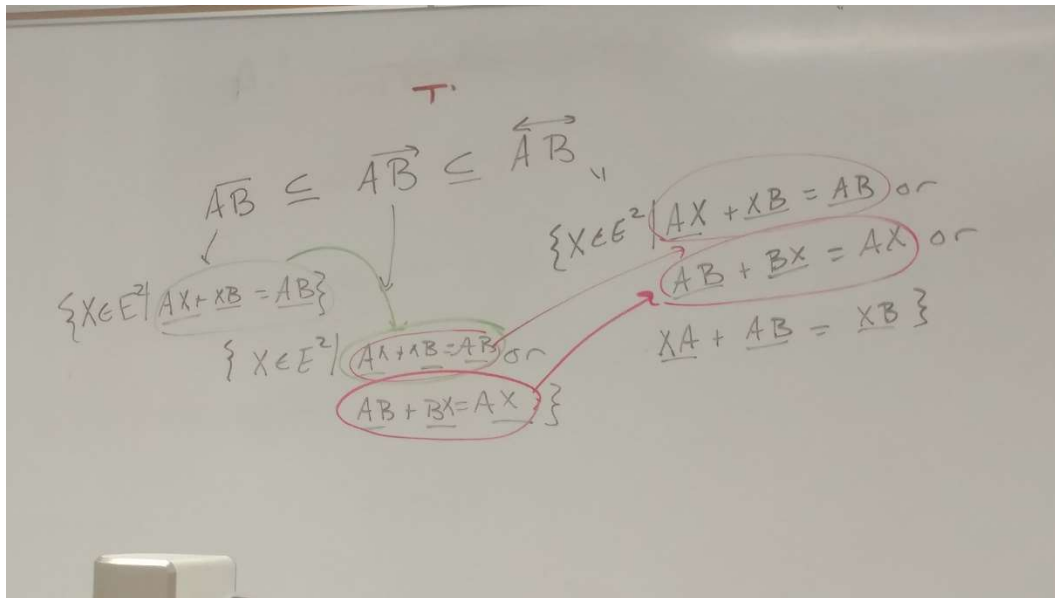


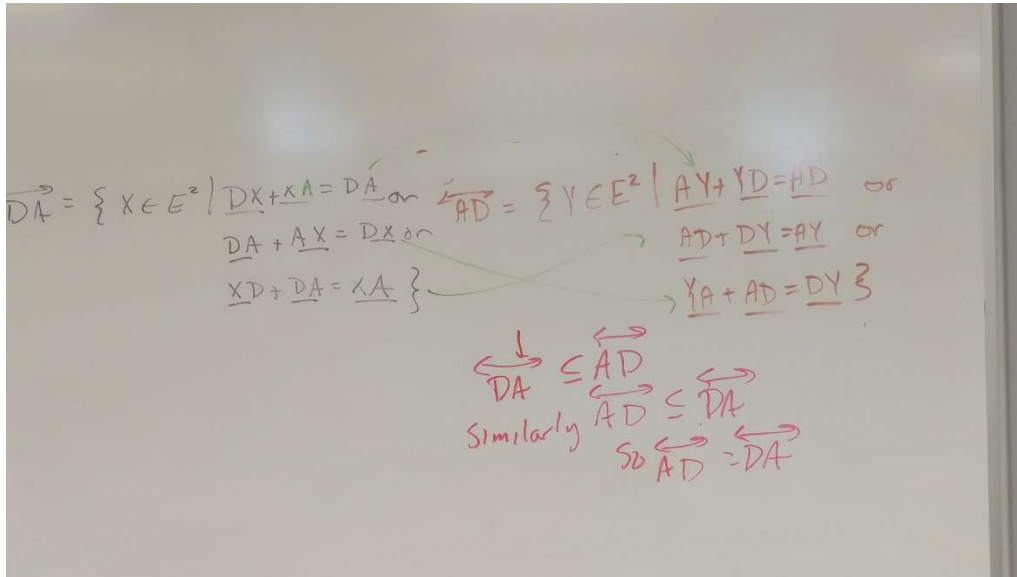
Emily's proof of theorem 4. The equation in parentheses is true, but wasn't used in the proof.



This proves  $\overline{AB} \subseteq \overleftrightarrow{AB} \subseteq \overleftrightarrow{\overline{AB}}$  (I'm going to squeeze this in as part b of theorem 1)



This proves that  $\overrightarrow{AD} = \overrightarrow{DA}$  (I'm going to squeeze this in as part c of theorem 1)



This is 90% of the proof of theorem 6. Read the black and brown text from left to right to get the 12 element-of statements.

Then go back and circle (in red) the ones that show what A is an element of, circle (in green) what B is an element of, circle (in blue) what C is an element of, circle (not done yet) in some other color what D is an element of. Notice that all 4 of the points are each in all 3 of the possible lines defined by the other two.

