January-17-11

Lemma 
$$A \xrightarrow{l} B \xrightarrow{2} C$$
 is given. Then
$$\frac{|\ker 2 \circ l|}{|\ker l|} \cong \ker 2 \cap im 1$$

## I still don't understand Hutchings!

Perhaps we need a new Hutchings Theory, in which relations don't form a tower; i.e.,

 $K'_{m+1} \xrightarrow{f} K'_{m} \xrightarrow{} \mathcal{D}'_{m} \xrightarrow{} 0$ isn't necessary exact; in Fact of may not even exist.