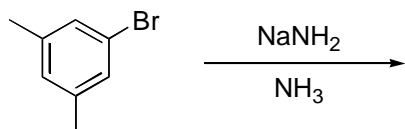


1. (4) Draw structures for (1) DMAP (2) BnOTs (3) THF (4) pyridine.

2. (4) Predict the outcome of the reaction below.



4. (15) Balance the equations below and provide a reasonable mechanism for each transformation. Show all products.

