What are the products of the following reactions. Show stereochemistry if appropriate.

1. \[ \text{CH}_3\text{CH=CHBr} + \text{NaNH}_2 \rightarrow \text{BrPh-CH}_2\text{CH}_2\text{CH}_2\text{Br} \] (excess)

2. \[ \text{1 mole} \quad \text{H+}, \text{Br-} \rightarrow \text{heat} \]

3. Give two resonance structures obeying the octet rule for the anion \( \text{OCN}^- \). Show formal charges.

4. Provide an efficient synthesis of the following alkyne from saturated alcohols having four or fewer carbons.

\[ \text{CH}_3\text{CH=CH}_2 \]