Electrophilic addition

\[ \text{but-1-ene} \rightarrow \text{cyclobromonium ion} \]

Bromine is being reduced from oxidation 0 to -1, which is favorable (\( \text{Br}_2 \) is acting as an oxidizing agent).

Benzyl carbocations can form even if they are primary due to conjugation with the neighboring benzene ring.

\( \text{(E)-1,2-diphenylethene} \)

\( \text{no} \ \text{"1,2" needed since alkene only has two carbons} \)
\[
\text{CH}_3 - \text{ methyl} \quad -\text{CH}_2 - \text{ methylene}
\]

Para  meta  ortho