

THEORY

1. The reaction of an alkene with a halogen is an example of an electrophilic addition reaction. The mechanism involves the formation of a carbocation intermediate. The carbocation is then attacked by a nucleophile, resulting in the formation of a halogenoalkane.

2. The reaction of an alkene with a hydrogen halide is an example of an electrophilic addition reaction. The mechanism involves the formation of a carbocation intermediate. The carbocation is then attacked by a halide ion, resulting in the formation of a halogenoalkane.

3. The reaction of an alkene with a halogenoalkane is an example of a nucleophilic substitution reaction. The mechanism involves the formation of a carbocation intermediate. The carbocation is then attacked by a halide ion, resulting in the formation of a halogenoalkane.

Step	Intermediate	Product
1	Carbocation	Halogenoalkane
2	Carbocation	Halogenoalkane
3	Carbocation	Halogenoalkane

QUESTION

