1. Give the major product(s) of the following reactions.

a) ![Chemical structure](image1)

b) ![Chemical structure](image2)

c) ![Chemical structure](image3)

d) ![Chemical structure](image4)

e) ![Chemical structure](image5)

f) ![Chemical structure](image6)

2. Show how you would accomplish the following transformation. Give reagents over the arrow and structures of isolated intermediate compounds. Mechanisms are not necessary.

![Chemical structure](image7)

3. Draw the most important resonance structure for the intermediate in the chlorination of methoxybenzene.

![Chemical structure](image8)