## Organic I

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Quiz #5 Name Key

There is a total of 30 points for this quiz.

## Answer all questions in the space provided.

[I] Give an example of Heck Reaction and draw the detailed electron pushing mechanism. (5 points)

eg: 
$$CII^{Br} + CH_2 = CH_2 \frac{PdL_2}{(CH_3CH_2)_3N}$$
  $CII^{CH} = CH_2$ 

[II] When the following compound undergoes solvolysis in ethanol, three products are obtained. Propose a mechanism to account for the formation of these products? (6 points)

Ch.10, Q.50

[III] Draw the major product(s) of each of the following reactions. (6 points)

[IV] Fill in each box with the appropriate reagent. (5 points)

a.

[V] Draw the products of each of the following reactions. (8 points)

c. OH 
$$\frac{1. \text{ TsCl/ pyridine}}{2. \text{ NaC} \equiv \text{N}}$$
 Ch.II, Q 54 g

d. 
$$\frac{1.\text{Li}}{2.\text{B(OR)}_3}$$

$$3.\text{CH}_2=\text{CHBr, PdL}_2, \text{ HO}$$
Ch.12, Q.31d.