Quiz 4b

Name:

Signature:

Recitation Instructor:

Start 5 minutes in, 30 minutes total... as always Good luck!

1. Predict the products of the following reactions (4 points each)
   A. 
   \[
   \text{Br} \xrightarrow{\text{Me}_2\text{Sn} \ Pd(0)} \text{C}_6\text{H}_5
   \]
   B. 
   \[
   \text{N}_2 \xrightarrow{\text{KCN/CuCN} \ HCl} \text{C}_6\text{H}_5\text{C}=\text{N}
   \]

2. Show a mechanism for the following transformation (6 points).

3. Show a synthesis for the following (6 points)
Quiz 4c

Name:

Signature:

Recitation Instructor:

Start 5 minutes in, 30 minutes total... as always  Good luck!

1. Predict the products of the following reactions (4 points each)
   
   A. \[
   \text{NH}_2 \xrightarrow{\text{Mel (3 equivalents)}} \text{CNH}_2
   \]
   
   B. \[
   \text{Br} \xrightarrow{\text{Cu(I), Pd(PPh}_3)_4, \text{Et}_3\text{N}} \text{Ph}
   \]

2. Show a mechanism for the following transformation (6 points).

   \[
   \text{HO} \xrightarrow{\text{N}_2} \text{CO}
   \]

3. Show a synthesis for the following (6 points)

   \[
   \text{only starting material}
   \]
Quiz 4d

Name:

Signature:

Recitation Instructor:

Start 5 minutes in, 30 minutes total... as always  Good luck!

1. Predict the products of the following reactions (4 points each)
   A. 
   
   B. 

2. Predict which of the following diastereomers could be more likely to form and explain your answer (6 points).

3. Show a synthesis for the following (6 points)
   
   start with benzene and anything 2 carbons or less
Quiz 4e

Name:

Signature:

Recitation Instructor:

Start 5 minutes in, 30 minutes total... as always Good luck!

1. Predict the products of the following reactions (4 points each)
   
   A.
   
   B.

2. Show the intermediates and compounds generated in the following cross-metathesis (6 points).

3. Show a synthesis for the following (6 points)

   start with benzene and anything 2 carbons or less