

1. What is the largest possible value for  $R_f$ ? (3 pts)

1

2. What is the smallest possible value for  $R_f$ ? (3 pts)

0

3. Circle all that are suitable for large (preparative) scale separations (4 pts)

a. TLC

b. Column chromatography

c. gas chromatography

d. HPLC

4. Why is it important to place a filter paper soaked with solvent in the chromatographic trough? (3 pts)

Saturate the air with  
solvent vapors

5. Why can't we use a felt tip pen to mark the starting line on our TLC plates before chromatography? (2 pts)

the ink will dissolve  
and contaminate the solvent  
and plates