| Mathematics 174 Quiz #1 | Name: |  |
|-------------------------|-------|--|
|-------------------------|-------|--|

Fill in the truth tables for  $\sim$ ,  $\vee$ ,  $\wedge$ ,  $\rightarrow$ , and  $\leftrightarrow$ .

|            | p $q$ | $p \lor q$ | p $q$ | $p \wedge q$ | p $q$ | $p \rightarrow q$ | p $q$ | $p \leftrightarrow q$ |
|------------|-------|------------|-------|--------------|-------|-------------------|-------|-----------------------|
| $p \sim p$ |       |            |       |              |       |                   |       |                       |
|            |       |            |       |              |       |                   |       |                       |
|            |       |            |       |              |       |                   |       |                       |
|            |       |            |       |              |       |                   |       |                       |