Name: $\qquad$ Date: $\qquad$

## For Problems 1 and 2 write a two column proof for the given theorems:

1. Theorem 3-3: If two parallel lines are cut by a transversal, then the alternate exterior angles are congruent.

Given: a //b
Prove: $<1 \cong<4$


| Statements | Reasons |
| :--- | :--- |
|  |  |
|  |  |

2. Theorem 3-4: If two parallel lines are cut by a transversal, then the same-side exterior angles are supplementary.

Given: a // b
Prove: < 1 and < 3 are supplementary


## Reasons

