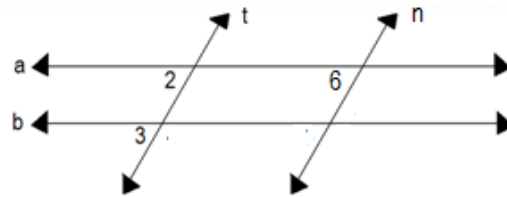


Group Activity— This proof has its statements and reasons out of order. First organize the statements into a logical sequence, and then organize the reasons. Each person in the group should write down the proof in the proper sequence (this includes the diagram, the ‘Given statement’, and ‘Prove statement’).

Given: $t // n$ and $\angle 3 \cong \angle 6$

Prove: $a // b$

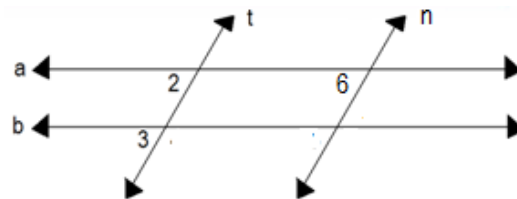


| Statements | Reasons |
|---------------------------|---|
| $m\angle 3 = m\angle 6$ | Corresponding Angles are Congruent |
| $\angle 3 \cong \angle 6$ | If two lines and a transversal form congruent corresponding angles, then the lines are parallel |
| $m\angle 2 = m\angle 6$ | Substitution Property of Equality |
| $t // n$ | Definition of Congruence |
| $\angle 2 \cong \angle 6$ | Given |
| $m\angle 3 = m\angle 2$ | Definition of Congruence |
| $a // b$ | Definition of Congruence |
| $\angle 3 \cong \angle 6$ | Given |

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