**GEOMETRY Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**CONGRUENT TRIANGLES PROOFS**

Write a two column proof for the following problems.



1. Given: M is the midpoint of $\overbar{AB}$ and $\overbar{PQ}$

Prove: $∆APM ≅∆QBM$



1. Given: $\overbar{NT }$ is parallel and $≅$ to $\overbar{MO}$

Prove: $<M≅ <T$

1. Given: $\overbar{VW }$ is parallel and $≅$ to $\overbar{YZ}$

Prove: $∆XVW ≅ ∆XZY$



1. Given: $\overbar{PO }$ is parallel to $\overbar{IT}$

 $ \overbar{PI} ≅ \overbar{TO}$

 <O ≅ <I

Prove: $PO ≅ IT$



1. Given: $\overbar{PS }$ is the angle bisector of $<QPR$

<QSP≅<RSP

Prove: S is the midpoint of QR