

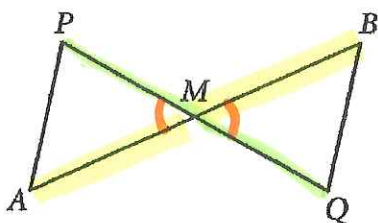
## Advanced Congruent Triangle Practice

Use the given information to identify the congruent triangles.  
Describe what congruence shortcut you used and what angles or sides you know are congruent.  
(Show your Geometry!!!)

Use your three different colors to identify your three corresponding congruent parts.

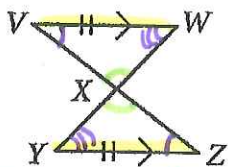
1.  $M$  is the midpoint of  $\overline{AB}$  and  $\overline{PQ}$ .

$\triangle APM \cong \triangle \underline{BQM}$



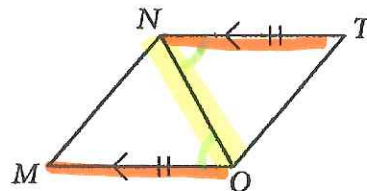
- S:  $PM \cong MQ$  def of midpt  
A:  $\angle AMP \cong \angle BMQ$  vertical  $\angle$ s are  $\cong$   
S:  $AM \cong MB$  def of midpt

3.  $\triangle XVW \cong \triangle \underline{XZY}$



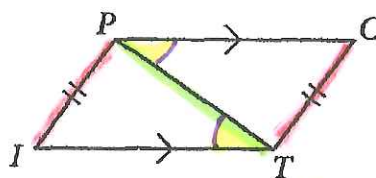
- A:  $\angle WXV \cong \angle ZXY$  vertical  $\angle$ s are  $\cong$   
A:  $\angle V \cong \angle Z$  alt. int.  $\angle$ s are  $\cong$   
S:  $VW \cong ZY$  given

2.  $\triangle MON \cong \underline{\triangle TNO}$



- S:  $NT \cong NO$  given  
A:  $\angle TNO \cong \angle MON$  alt. int.  $\angle$ s are  $\cong$   
S:  $NO \cong NO$  reflexive

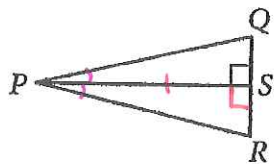
4.  $\triangle PIT \cong \triangle \underline{\cancel{TOP}}$  none



No swearing in math!

5.  $\overline{PS}$  is the angle bisector of  $\angle QPR$ .

$\triangle PQS \cong \triangle \underline{PRS}$



- A:  $\angle QSP \cong \angle RSP$  & right  $\angle$ s are suppl. def of straight  $\angle$   
S:  $PS \cong PS$  reflexive  
A:  $\angle QPS \cong \angle RPS$  def of  $\angle$  bisector