

Chp 8 Continues off of Chp 7

8.1 Converse to the Parallel Lines Thms/Pas

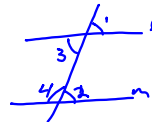
In Chp 7 we should have learned
 If 2 lines are parallel, then

1. Corresponding \angle 's are \cong
2. Alternate Interior \angle 's are \cong
3. Co-Interior \angle 's are supplementary

If two lines are cut by a transversal and...

1. Corresponding \angle 's are \cong
2. Alternate Interiors are \cong
3. Co-Interior \angle 's are supplementary

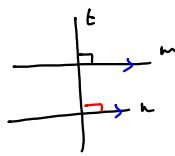
then the lines are parallel



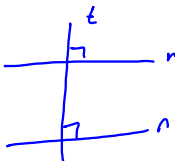
If $\angle 1 \cong \angle 2$
 or $m\angle 1 = m\angle 2$
 then $l \parallel m$
 corresponding \angle converse

If $\angle 2 \cong \angle 3$
 or $m\angle 2 = m\angle 3$
 then $l \parallel m$
 Alternate Interior \angle converse

If $\angle 3 + \angle 4 = 180$
 or $m\angle 3 + m\angle 4 = 180$
 then $l \parallel m$
 Co-Interior \angle converse



If $t \perp m$ and $m \parallel n$
 by corresponding \angle 's
 then $t \perp n$
 Perpendicular Transversal



If $t \perp n$ and $t \perp m$
 by corres \angle converse
 then $m \parallel n$
 Perpendicular Transversal Converse

Proving Lines are parallel using converses

Corresponding \angle 's
 Alt Int \angle 's
 Co-Int \angle 's
 Perpendicular