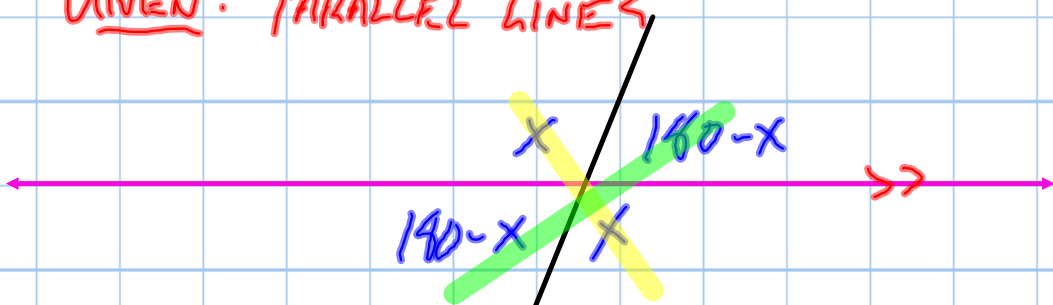
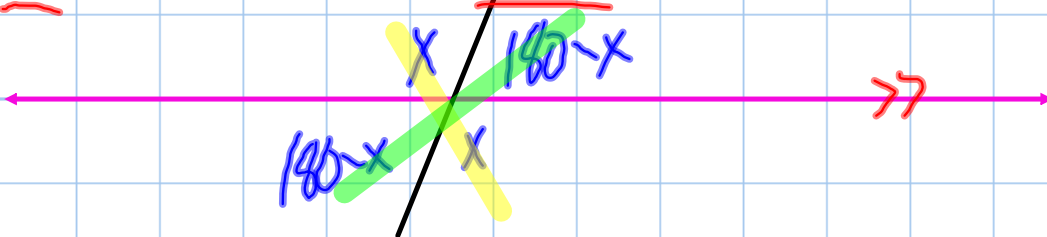


GIVEN: PARALLEL LINES



IF PARALLEL LINES THEN:

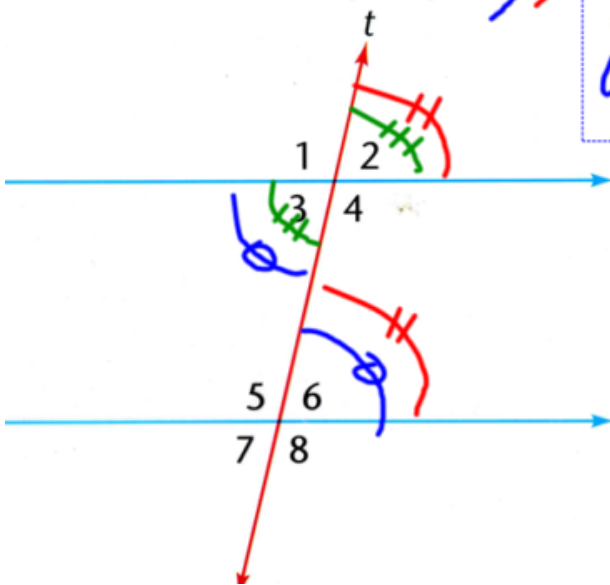


3.2.2

POSTULATE: If two parallel lines are cut by a transversal then corresponding angles congruent.

THM STATEMENT: If two parallel lines are cut by a transversal then alternate interior angles congruent.

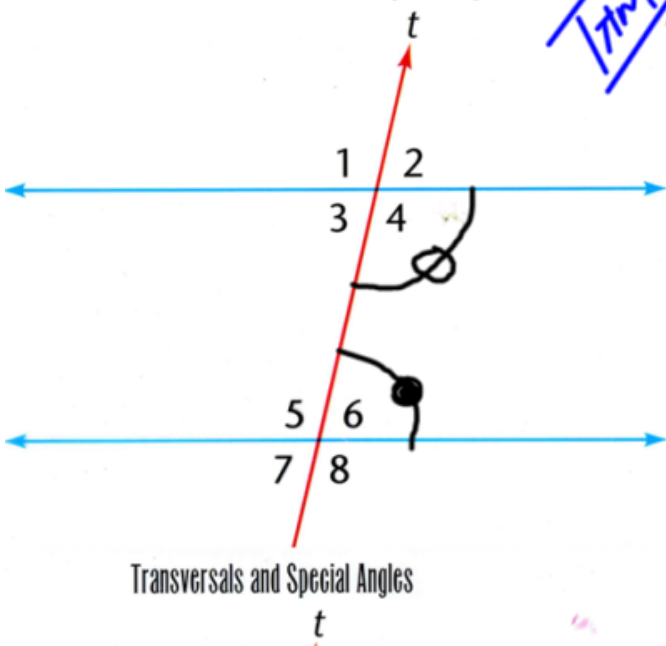
Transversals and Special Angles



GIVEN: $m \parallel n$ PROVE: $\angle 3 \cong \angle 6$

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. $m \parallel n$ 2. $\angle 2 \cong \angle 6$ 3. $\angle 2 \cong \angle 3$ <p>$\therefore \angle 3 \cong \angle 6$</p> | <ol style="list-style-type: none"> 1. GIVEN 2. $\parallel \rightarrow \angle 2 \cong \angle 6$ (1) 3. VERT $\angle 2 \cong \angle 3$ (D) <p>\therefore Trans \cong (2,3)</p> |
|--|---|

Transversals and Special Angles



Transversals and Special Angles
 t

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If two parallel lines are cut by a transversal then same-side interior angles **supplementary**.

m	1. $\angle 3, \angle 4$ lin t	1. AFID
	2. $\angle 2$ sup $\angle 4$	2. lin t \rightarrow sup (1)
	3. $m \parallel n$	3. lin t -
n	4. $\angle 2 \cong \angle 6$	4. $\parallel \rightarrow$ \angle $(s \cong (3))$

$\square \angle 4$ sup $\angle 6$ \square (SUBSTITUTION) $(4 \rightarrow 2)$

Parallel Lines and Transversal.gsp