

# Geometry

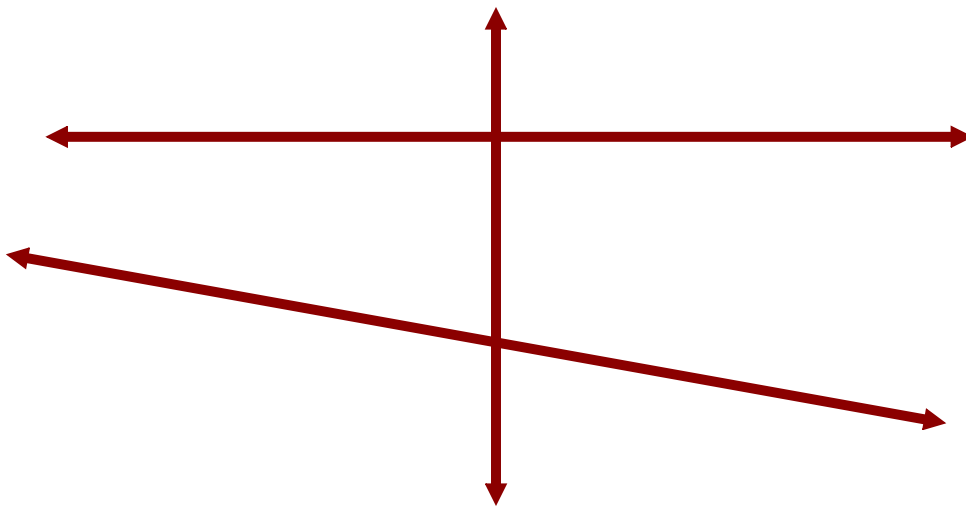
10/2

What does it mean for two lines to be parallel? If you plot lines on a coordinate plane, how can you tell if they are parallel or not?

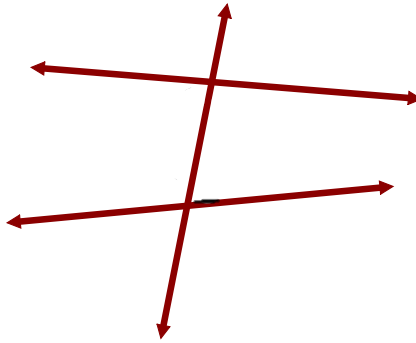
## Sec. 3-1

## Prop. of Par. lines

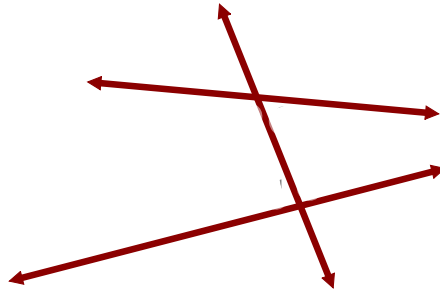
One of the most common ways in which we examine lines and angles is when there are two lines both crossed by a single line (called a transversal).



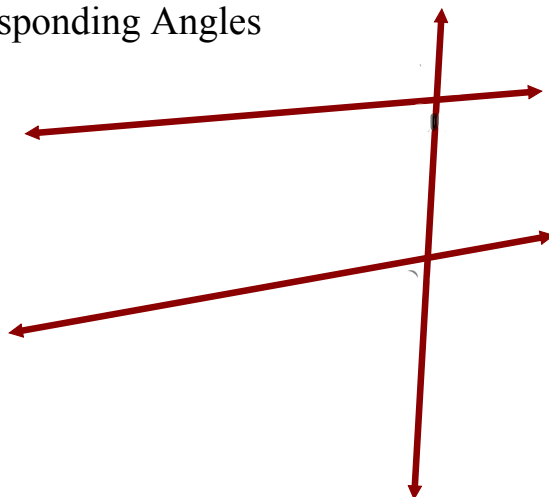
## Alternate Interior Angles



## Same-side Interior Angles



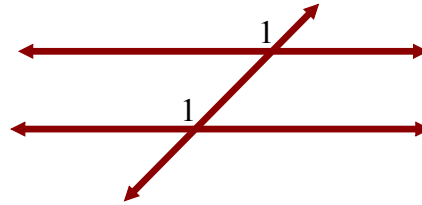
## Corresponding Angles



Now, there are some basic Properties that we need to know...

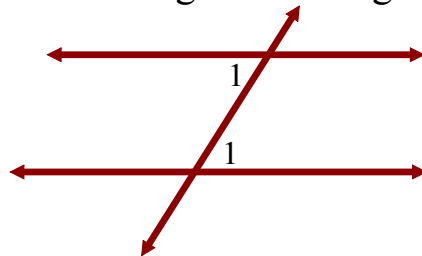
Postulate 3-1

If a transversal intersects two parallel lines, then the corresponding angles are congruent.



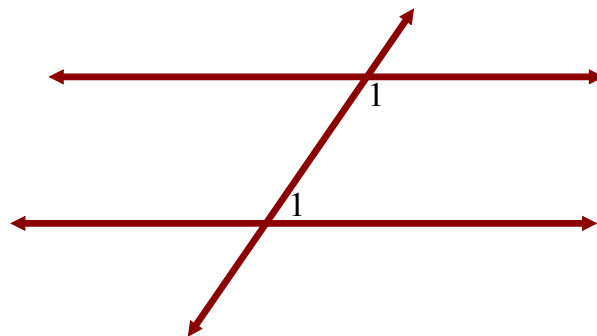
Theorem 3-1

If a transversal intersects two parallel lines, then alternate interior angles are congruent



Theorem 3-2

If a transversal intersects two parallel lines, then the same-side interior angles are supplementary.



Last thing you need for this section...

If you are asked to do a two-column proof, is it basically the same as the justifying that we did last chapter. List what you did on one side, and what rules allow you to do it on the other... (see page 117 for examples).

Pg. 118, #1-16