

Geometry: 3.1 Pairs of Lines and Angles

This entire section is basically comprehending vocabulary. This is a list of the vocab we'll be learning today.

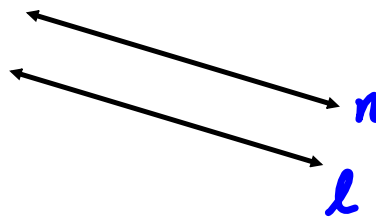
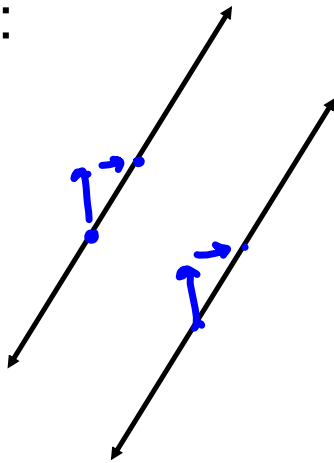
Parallel, Perpendicular, Corresponding Angles, Alternate Interior Angles, Alternate Exterior Angles, Consecutive Interior Angles.

Parallel Lines:

$$y = mx + b$$

Two lines that... *never touch*
because they have
the same slope

Ex:



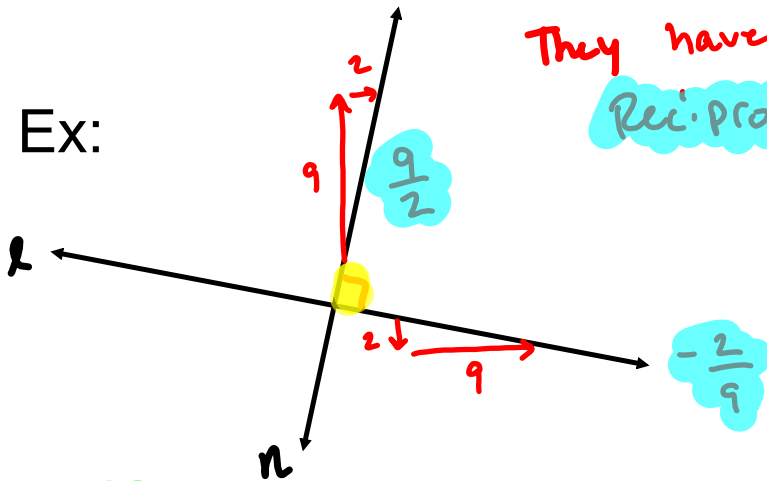
Symbol for Parallel: $n \parallel l$ $n \parallel l$

Perpendicular Lines:

Two lines that... intersect forming **Right Angles**.

They have an **opposite Reciprocal Slope**.

Ex:



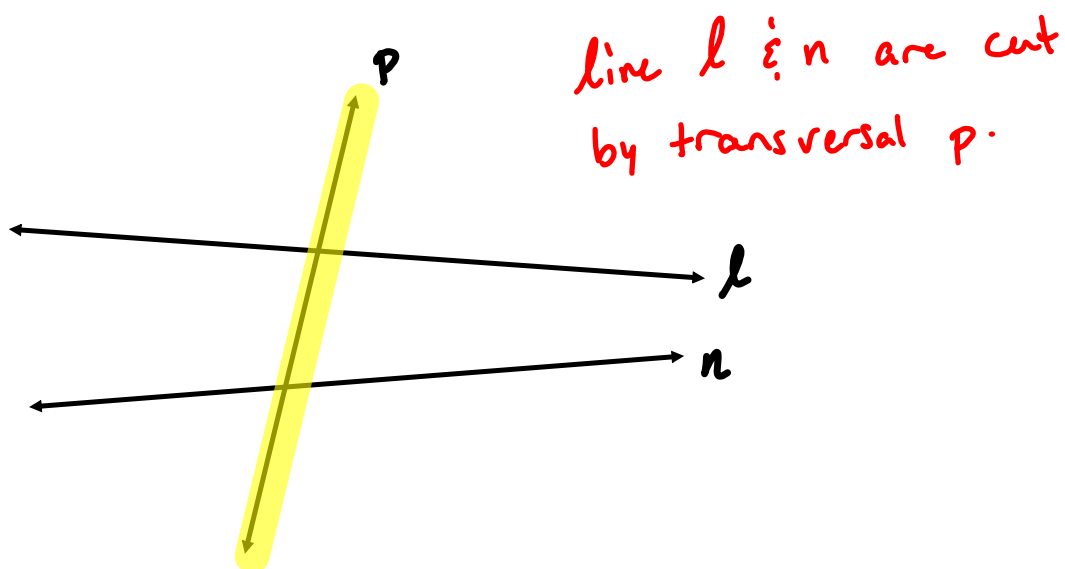
opposite : $+$ \rightarrow $-$
 $-$ \rightarrow $+$
reciprocal : $\frac{a}{b} \rightarrow \frac{b}{a}$

Symbol for Perpendicular:

$l \perp n$

Transversal: A line that intersects two or more lines.

Which of these 3 lines is a transversal?



Corresponding Angles: two angles at the same position (based on transversal).

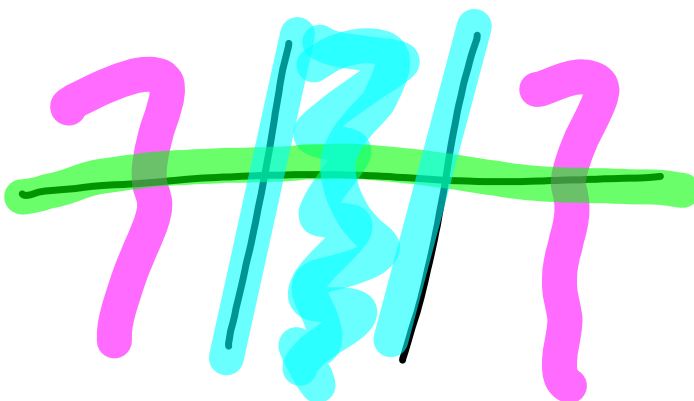
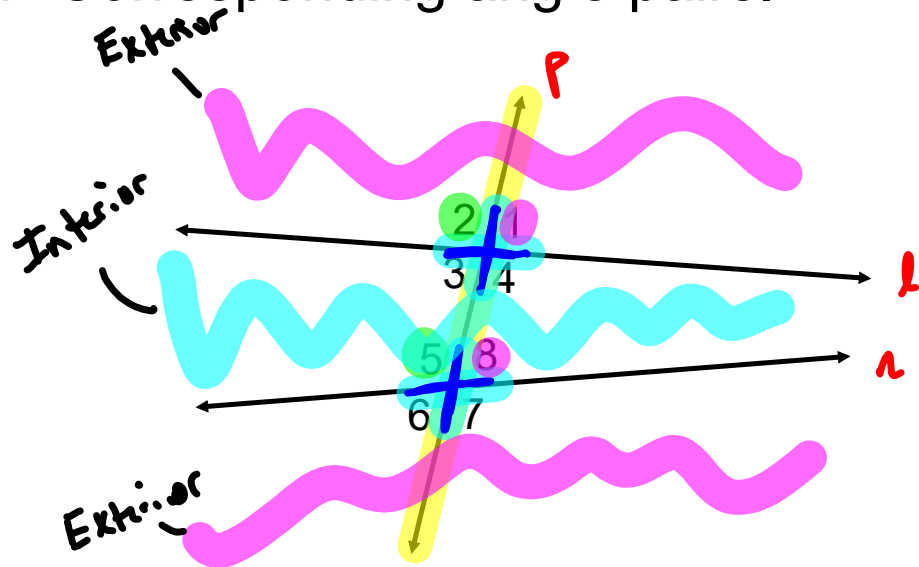
Ex: State all Corresponding angle pairs.

2 $\hat{=}$ 5

1 $\hat{=}$ 8

4 $\hat{=}$ 7

3 $\hat{=}$ 6



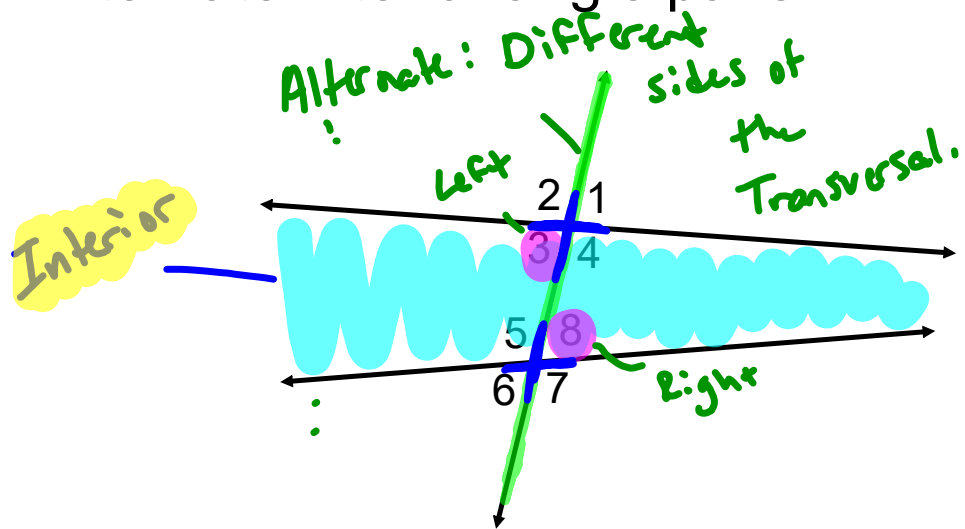
Alternate Interior Angles:

A pair of angles Between the two lines on Opposite sides of the transversal.

Ex: State all Alternate Interior angle pairs.

3 & 8

4 & 5



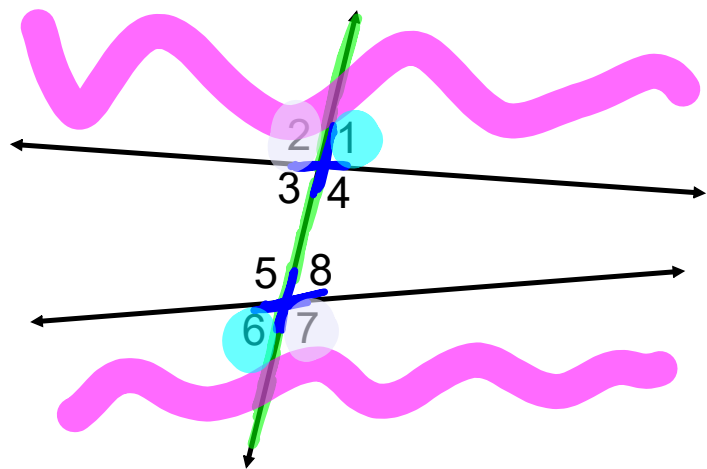
Alternate Exterior Angles:

A pair of angles outside the two lines on Opposite sides of the transversal.

Ex: State all Alternate Exterior angle pairs.

1 & 6

2 & 7



Consecutive Interior Angles:

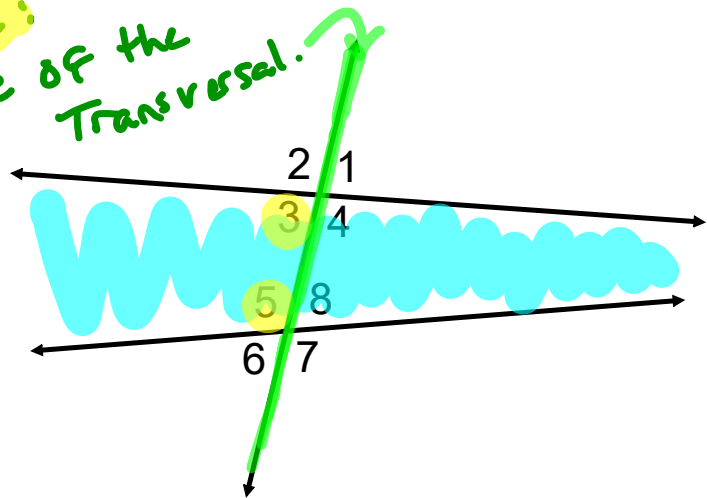
A pair of angles between the two lines on the Same side of the transversal.

Ex: State all Consecutive Interior angle pairs.

3 & 5

4 & 8

Consecutive:
Same side of the
Transversal.



Homework:

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