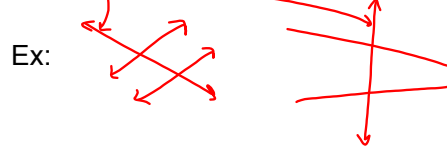


7-2
Parallel Lines and Transversals

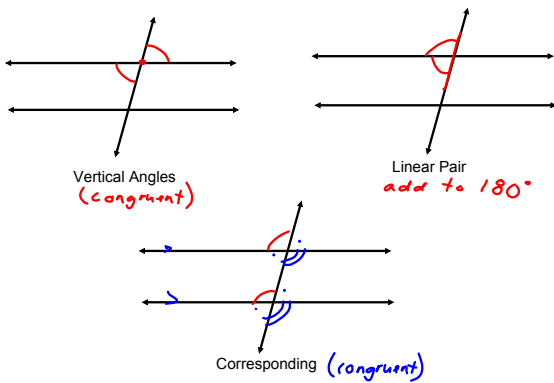
Parallel Lines: lines that never intersect (they have the same slope)



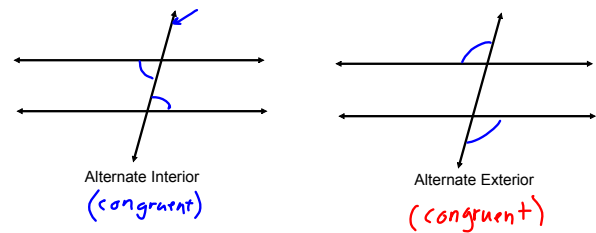
Transversal: a line that passes through at least two other lines



Angle Relationships

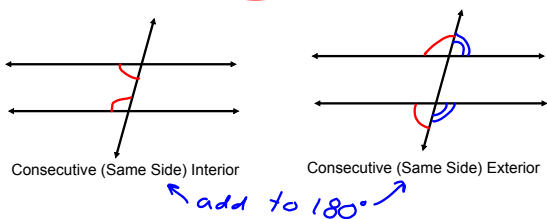


Angle Relationships (Alternate Angles)

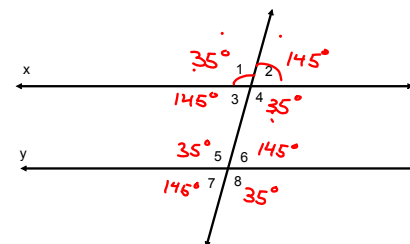


Angle Relationships (Consecutive Angles)

- Also known as Same Side Angles

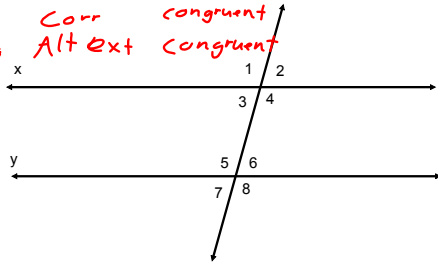


Example: Lines x and y are parallel and angle $\star 1$ is 35 degrees. Find the rest of the angle measurements.

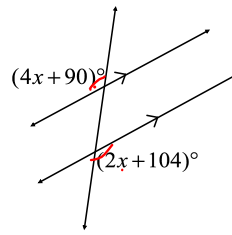


State how every other angle relates to angle 1 and what type of angles they are.

$\angle 1, \angle 2$ Lin Pair 180°
 $\angle 1, \angle 5$ Corr congruent
 $\angle 1, \angle 8$ Alt ext congruent

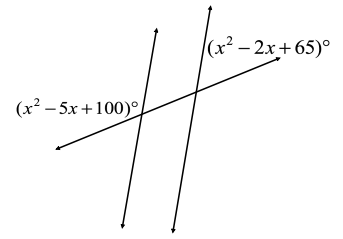


Solve for x



Type: alt ext
 Relationship: congruent
 Equation: $4x + 90 = 2x + 104$

$$\begin{array}{r} 4x + 90 = 2x + 104 \\ -2x \quad -2x \\ \hline 2x + 90 = 104 \\ -90 \quad -90 \\ \hline 2x = 14 \\ \frac{2x}{2} = \frac{14}{2} \\ x = 7 \end{array}$$



Type:
 Relationship:
 Equation:

7-2 HW

$\angle 3$ and $\angle 1$ lin pair

$\angle 3$ " $\angle 4$ lin pair

