$\qquad$
In Class Notes


A line that intersects 2 or more lines is called a $\qquad$ . When parallel lines are cut by a transversal, several pairs of congruent angles are formed.


When a transversal intersects parallel lines, $\qquad$
$\qquad$ are congruent.

Ex:) Use the figure to find the measures of $\angle 1 \& \angle 2$. Justify your reasoning.
Notes:



Ex:) Use the figure to find the measures of the numbered angles.


OYO:) Use the figure to find the measures of the numbered angles.

Notes:

Notes:



When a $\qquad$ intersects parallel lines,
and

$\qquad$
$\qquad$ are

Ex:) The photo shows a picture of an airport.
Describe the relationship between each pair of angles.
Notes:

a. $\angle 3 \& \angle 6$
b. $\angle 2 \& \angle 7$

OYO:) In the previous example, the measure of $\angle 4$ is $84^{\circ}$.
Notes:
Determine the measure of the given angles, and justify your reasoning.
a. $\angle 3$
b. $\angle 6$
a rail to two parallel posts, so that the rail is parallel to the incline of the steps.

Use angle relationships to find the measures of $\angle 4, \angle 5, \angle 6$, and $\angle 7$ that make the rail parallel to the incline of the steps.


OYO:) A cross-section of a pier is shown.
Notes:
Find the value of $a$.
Justify your answer.


