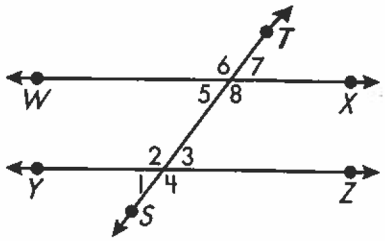
NAME _____

Lesson 1.5 Transversals

Parallel lines are two lines that will never meet. In the figure, $\overleftrightarrow{WX}$ and $\overleftrightarrow{YZ}$ are parallel lines.

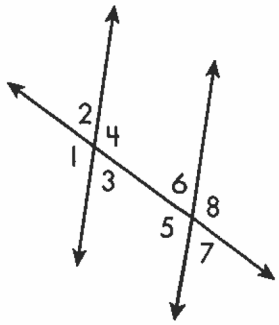
A **transversal** is a line that intersects two parallel lines. $\overleftrightarrow{ST}$ is a transversal of $\overleftrightarrow{YZ}$ and $\overleftrightarrow{WX}$.



Corresponding angles are formed when a transversal intersects parallel lines. Corresponding angles are angles ∠1 and ∠5, ∠2 and ∠6, ∠3 and ∠7, and ∠4 and ∠8.

Adjacent angles are any two angles that are next to one another, such as ∠1/∠2 and ∠2/∠3. Adjacent angles share a ray. They form supplementary angles (180°).

1. Name the pairs of adjacent angles in the figure.



∠____/∠____, ∠____/∠____, ∠____/∠____, ∠____/∠____,

∠____/∠____, ∠____/∠____, ∠____/∠____, ∠____/∠____,

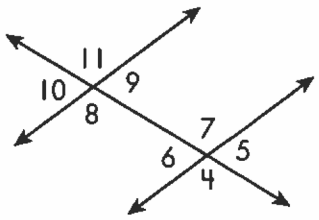
Alternate interior angles are those that are inside the parallel lines and opposite one another. ∠3 and ∠6 are alternate interior angles. They are congruent.

2. Name another pair of alternate interior angles in the figure.
∠_____/∠_____

Alternate exterior angles are those that are outside the parallel lines and opposite one another. ∠1 and ∠8 are alternate exterior angles. They are congruent.

3. Name another pair of alternate exterior angles in the figure. ∠_____/∠_____

List the following pairs of angles in the figure.



4. Adjacent:

∠____/∠____, ∠____/∠____, ∠____/∠____, ∠____/∠____,

∠____/∠____, ∠____/∠____, ∠____/∠____, ∠____/∠____,

5. Alternate interior: ∠_____/∠_____, ∠_____/∠_____

6. Alternate exterior: ∠_____/∠_____, ∠_____/∠_____