3 - 1
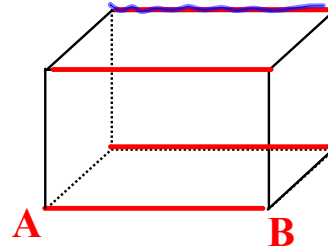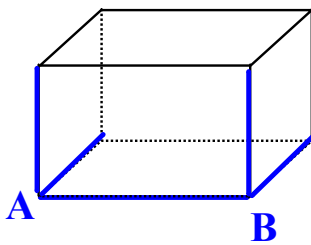## Parallel Lines and Transversals

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PARALLEL

Two lines in the same plane that never intersect.

All red segments are parallel to AB
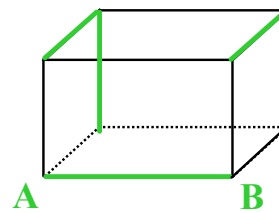

INTERSECTING

Two lines that cross at a specific point

All blue segments intersect AB
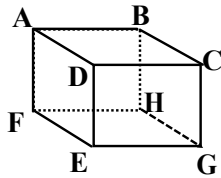

SKEW

Two lines in different planes that never intersect.

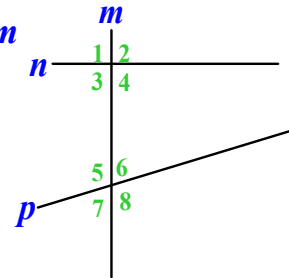*All green segments are skew to AB*

EX 1:

1) Name all segments parallel to AD

2) Name all segments skew to FH

3) Name all segments that intersect DC
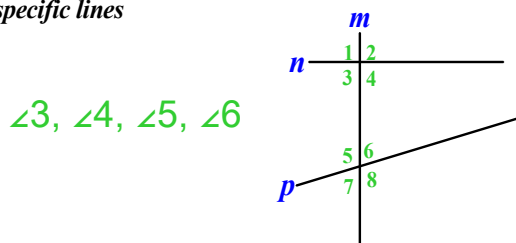
TERMS

Transversal
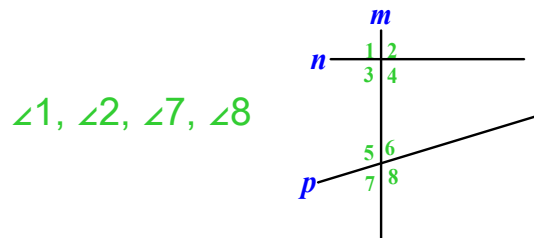*A line that intersects at least two other lines creating multiple angles.*

transversal - m

Interior Angles
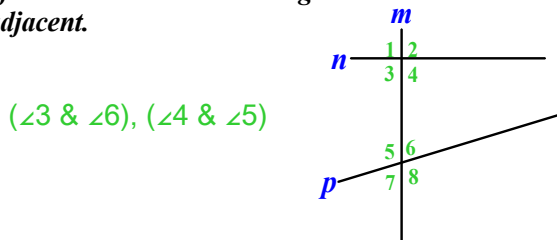*Angles located on the transversal, between two specific lines*

∠3, ∠4, ∠5, ∠6

Exterior Angles
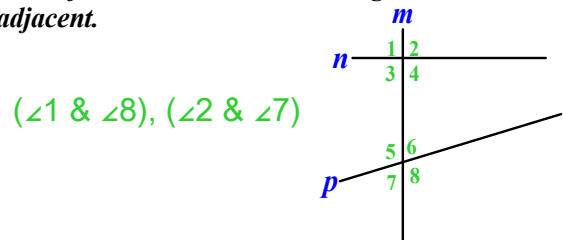*Angles located on the transversal, outside two specific lines*

∠1, ∠2, ∠7, ∠8

Alternate Interior Angles

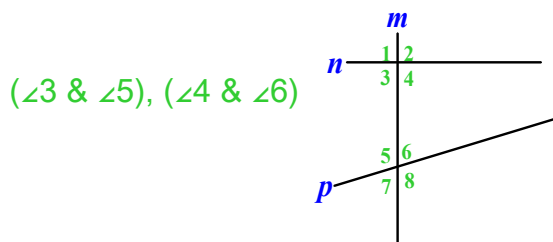*A Pair of Interior Angles located on opposite sides of the transversal. These angles are not adjacent.*

(∠3 & ∠6), (∠4 & ∠5)

Alternate Exterior Angles

A Pair of Exterior Angles located on opposite sides of the transversal. These angles are not adjacent.

(∠1 & ∠8), (∠2 & ∠7)

Consecutive Interior Angles

A Pair of Interior Angles located on the same side of the transversal.

(∠3 & ∠5), (∠4 & ∠6)

Corresponding Angles

A Pair of Angles. One is Interior, One is Exterior. Both of these angles are on the same side of the transversal. Not adjacent.

(∠1 & ∠5), (∠2 & ∠6)

(∠3 & ∠7), (∠4 & ∠8)