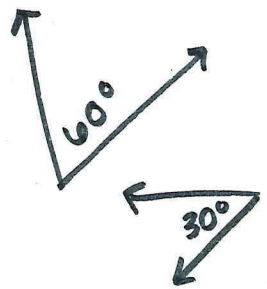
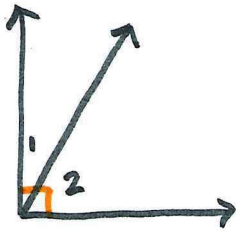
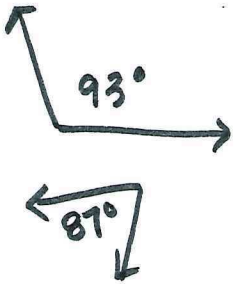
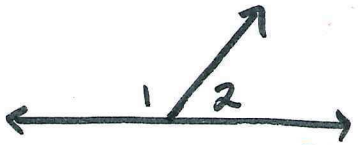
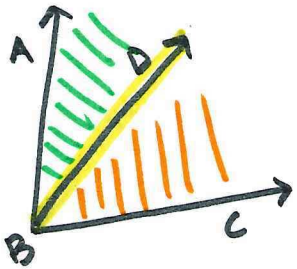
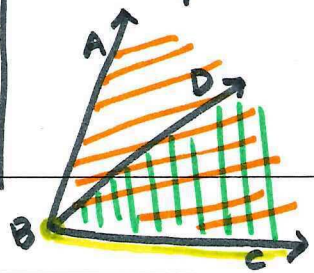
Section 1.5 Date

DESCRIBE ANGLE PAIR RELATIONSHIPS

Vocabulary	Definition	Example
COMPLEMENTARY ANGLES	Two angles whose sum is 90°. $\angle 1 + \angle 2 = 90°$	 
SUPPLEMENTARY ANGLES	Two angles whose sum is 180°. $\angle 1 + \angle 2 = 180°$	  ↑ 2 angles that form a line
ADJACENT ANGLES	Two angles that share a common vertex and/~~or~~ side but have no common interior points. ↳ rays	 ∠ABD and ∠DBC are adjacent ∠s. $\overrightarrow{BD}$ is the common side. B is the common vertex. Non example:  ∠DBC and ∠ABC - common vertex B - common side $\overrightarrow{BC}$ - They have common interior points (overlap) NOT ADJACENT

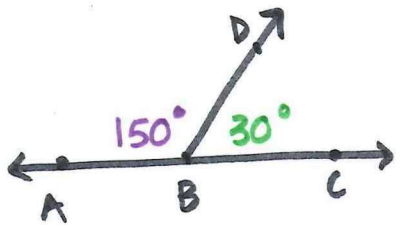
LINEAR PAIR
LP

Two adjacent angles (next to each other) are a linear pair if their uncommon sides are opposite rays. → forms a line

What is the angle pair relationship?

Supplementary Angles

$m\angle 1 + m\angle 2 = 180°$



∠ABD and ∠DBC are linear pairs (LP).

$m\angle ABD + m\angle DBC = m\angle ABC\ (180°)$

$150 + 30 = 180$ ✓

VERTICAL ANGLES
VA

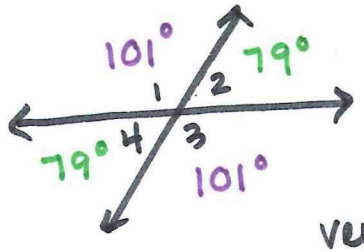
Two angles are vertical if their sides form two pairs of opposite rays. Formed by 2 lines intersecting

What is the angle pair relationship?

congruent

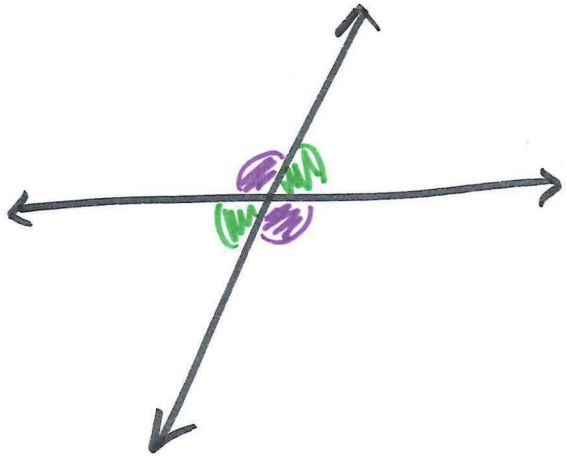
$\angle 1 \cong \angle 3 \rightarrow m\angle 1 = m\angle 3$

$\angle 2 \cong \angle 4 \rightarrow m\angle 2 = m\angle 4$



vertical ∠s (VA)
∠1 and ∠3
∠2 and ∠4

Linear Pairs (LP)
∠1 and ∠2
∠1 and ∠4
∠2 and ∠3
∠3 and ∠4



vertical ∠s (≅)

[purple] = [purple]

[green] = [green]

Linear Pairs (Supplementary)

[purple] + [green] = 180°