



Chapter 2 - Review

Old Stuff → complementary angles  $a + b = 90^\circ$

supplementary angles

 $a + b = 180^\circ$

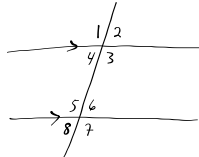
vertically opposite

angles



$a = c$
 $b = d$

New Stuff



parallel lines \longleftrightarrow corresponding angles are equal
 $\angle 1 = \angle 5$ $\angle 3 = \angle 7$
 $\angle 2 = \angle 6$ $\angle 4 = \angle 8$

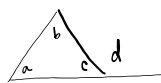
parallel lines \longleftrightarrow alternate interior angles equal
 $\angle 4 = \angle 6$ $\angle 3 = \angle 5$

parallel lines \longleftrightarrow alternate exterior angles equal
 $\angle 1 = \angle 7$ and $\angle 2 = \angle 8$

parallel lines \longleftrightarrow same side interior angles are supplementary
 $\angle 4 + \angle 5 = 180^\circ$ $\angle 3 + \angle 6 = 180^\circ$

parallel lines \longleftrightarrow same side exterior angles are supplementary
 $\angle 1 + \angle 8 = 180^\circ$
 $\angle 2 + \angle 7 = 180^\circ$

Triangles → sum of the interior angles is 180°



$(a + b) + c = 180^\circ$

$(d) + c = 180^\circ$

→ the exterior angle is equal to the sum of the two non-adjacent interior angles.
 $d = a + b$

Polygons (convex)

- sum of interior angles

$S = 180^\circ(n - 2)$

- interior angle of a regular polygon

$\frac{180^\circ(n - 2)}{n}$

- Sum of exterior angles in any convex polygon

360°

