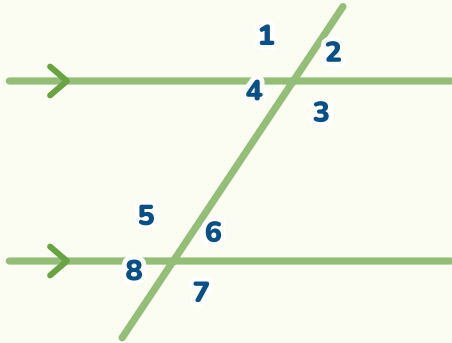




Angles in parallel lines



One diagram, six relationships

The arrow marks say the two horizontal lines are parallel. Start with the numbered pair, then decide where the angles sit.

$\angle 1$ and $\angle 5$
Corresponding
equal

$\angle 4$ and $\angle 6$
Alternate interior
equal

$\angle 1$ and $\angle 7$
Alternate exterior
equal

$\angle 4$ and $\angle 5$
Co-interior
add to 180°

$\angle 1$ and $\angle 3$
Vertical
equal

$\angle 1$ and $\angle 2$
Linear pair
add to 180°

Four pairs are equal; two add to 180° . "Interior" means between the parallel lines. "Alternate" means opposite sides of the transversal.