

AusVELS 7.0 Students will be able to identify corresponding alternate and co-interior angles when two straight lines are crossed by a transversal.

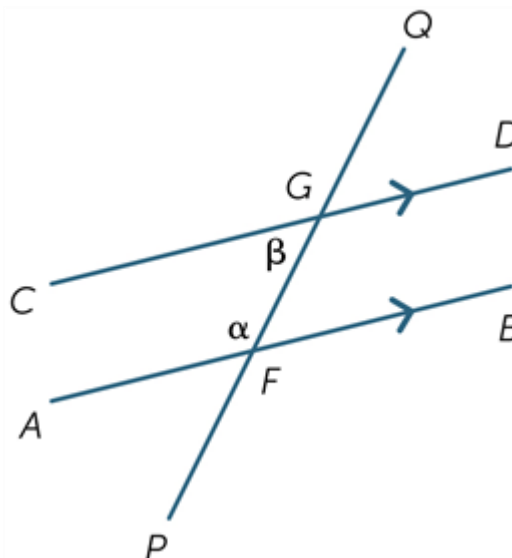
Naming Angles:

Use the letters labelled on parallel lines

Order the letters in alphabetical order

Eg.

$$\angle CGP + \angle AFQ = 180^\circ$$



Transversals and Corresponding Angles

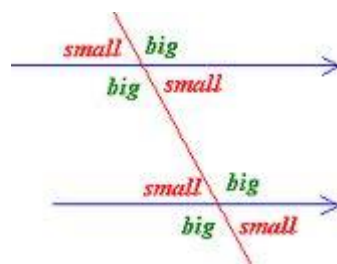
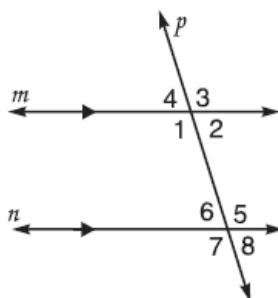
If two parallel lines are cut by a transversal, then the following pairs of angles are congruent:

Corresponding angles

Alternate interior angles

Alternate exterior angles

Remember to look for angles of the same size if equal:



Type of Angle	Property	Example
Vertically Opposite Angles	Are equal	$\angle 4$ & $\angle 2$ $\angle 3$ & $\angle 1$ $\angle 6$ & $\angle 8$ $\angle 5$ & $\angle 7$
Corresponding Angles	Are equal	$\angle 1$ & $\angle 7$ $\angle 2$ & $\angle 8$ $\angle 4$ & $\angle 6$ $\angle 3$ & $\angle 5$
Alternate interior angles	Are equal	$\angle 1$ & $\angle 5$ $\angle 2$ & $\angle 6$
Alternate exterior angles	Are equal	$\angle 4$ & $\angle 8$ $\angle 3$ & $\angle 7$
Supplementary Angles	Add to 180°	$\angle 3$ & $\angle 4$ $\angle 1$ & $\angle 2$ $\angle 5$ & $\angle 6$ $\angle 7$ & $\angle 8$
Co-interior Angles	Add to 180°	$\angle 1$ & $\angle 6$ $\angle 2$ & $\angle 5$

