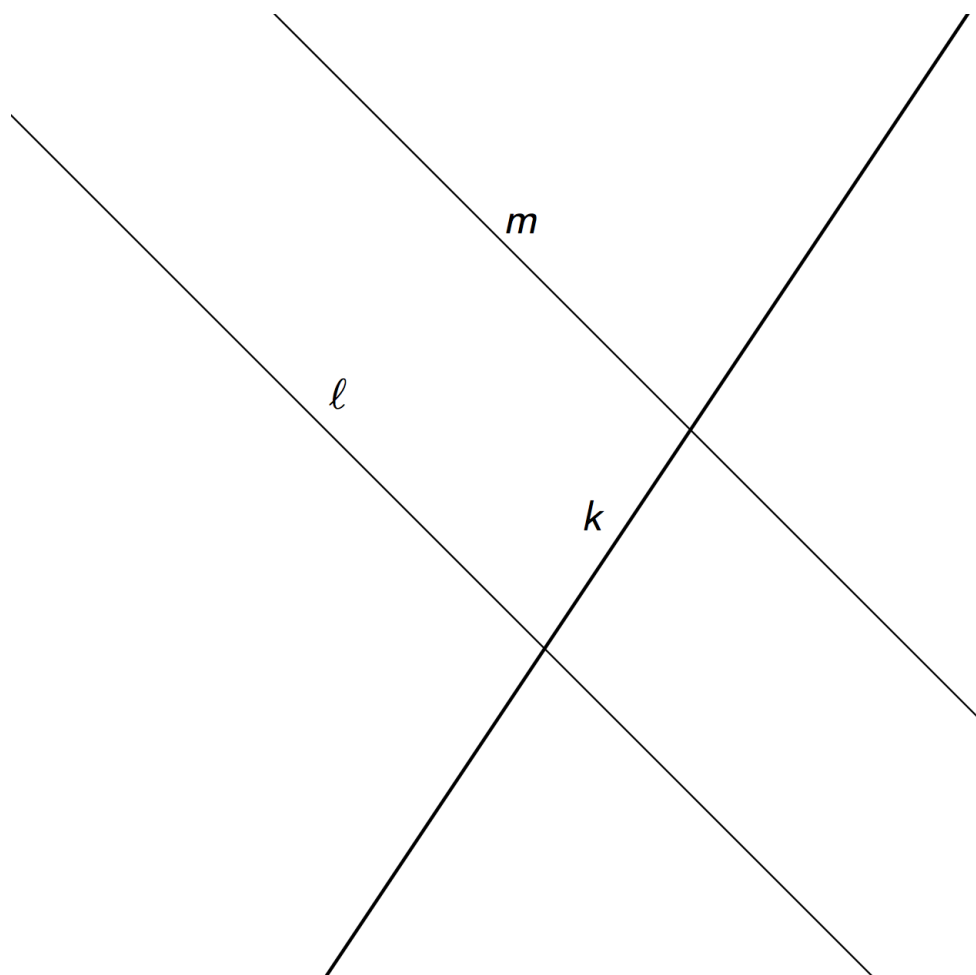


Transversals

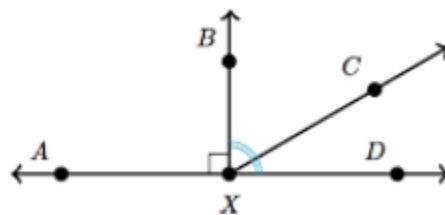
A transversal is a line that crosses parallel lines.



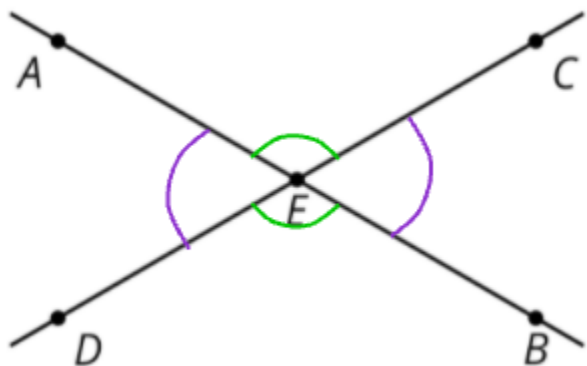
The diagram shows a transversal line k intersecting parallel lines l and m .

A transversal through a set of parallel lines gives us a lot of angle relationships to explore and determine congruence using rigid transformations!

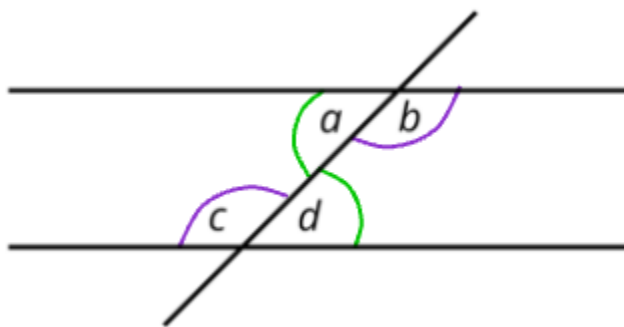
Angle Relationships



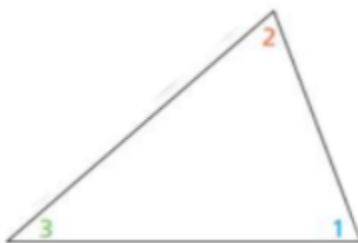
supplementary angles
(sum of 180°)



vertical angles
(congruent)



alternate interior angles
(congruent)



$$m\angle 1 + m\angle 2 + m\angle 3 = 180^\circ$$

interior angles of a triangle
(sum of 180°)