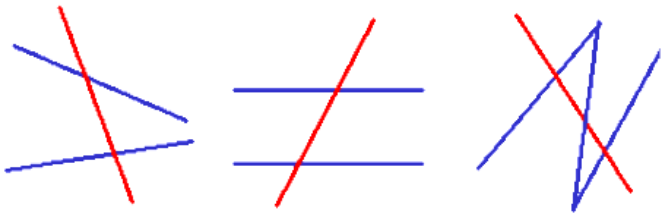
Notes Foldable

1) First fold your white paper in half like a "hotdog"
2) Now open your paper up, and we are going to fold both of the sides in...(watch me)
3) We are going to have 4 sections on each side of the middle.

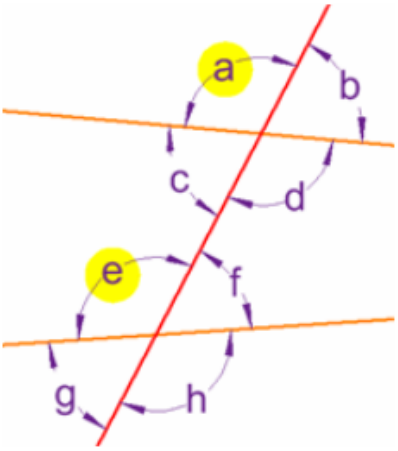
Transversal	Triangle Sum & Exterior
Corresponding	Vertical
Alternate Interior	Alternate Exterior
Supplementary	Complementary

Transversals

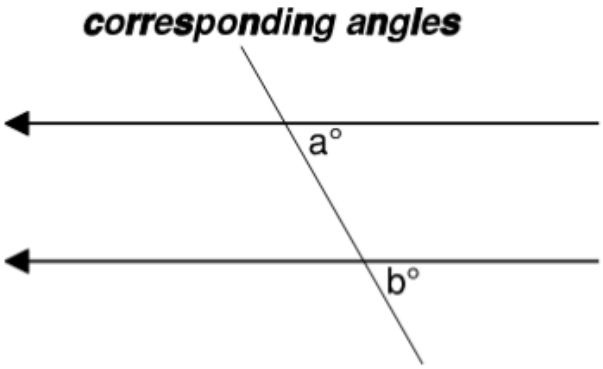
A Transversal is a line that crosses at least two other lines.



The angles in matching corners are called Corresponding Angles

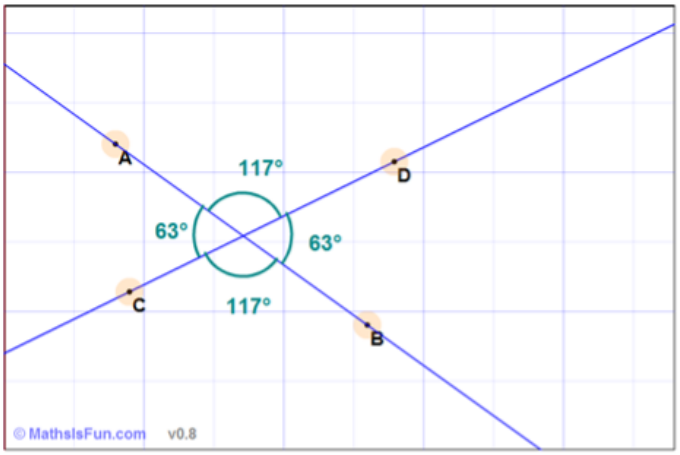


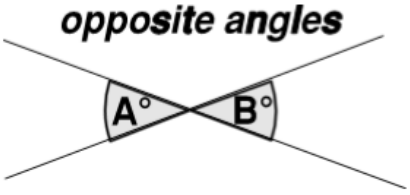
They have the same angle measure. In other words, if angle a is 120 degrees then angle e is 120 degrees.



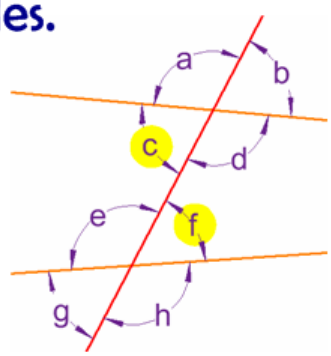
Vertical Angles

Vertical Angles are the angles opposite each other when two lines cross





The pairs of angles on opposite sides of the transversal but inside the two lines are called Alternate Interior Angles.

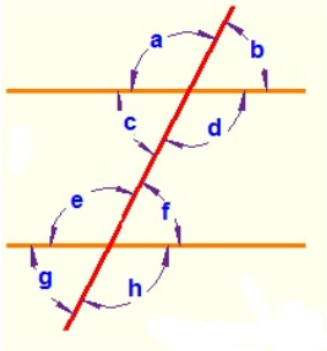


c and f are Alternate Interior Angles

They have the same angle measure. In other words, if angle c is 45 degrees then angle f is 45 degrees.

d and e are also Alternate Interior Angles

When two lines are crossed by another line, the pairs of angles on opposite sides of the transversal but outside the two lines are called Alternate Exterior Angles.



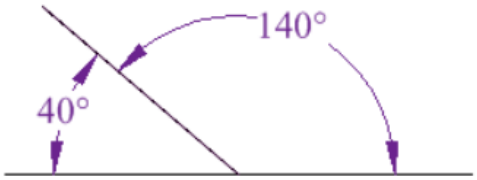
b and g are exterior angles

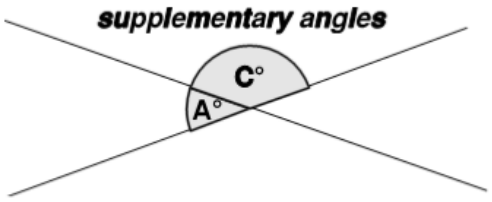
a and h are exterior angles

They have the same angle measure. In other words, if angle b is 68 degrees then angle g is 68 degrees.

Supplementary Angles

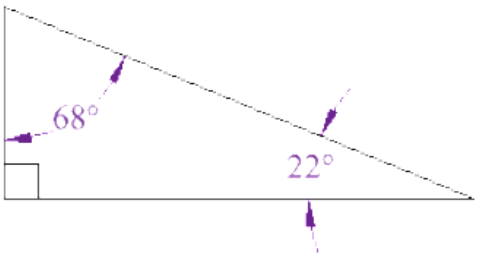
Two Angles are Supplementary if they add up to 180 degrees.

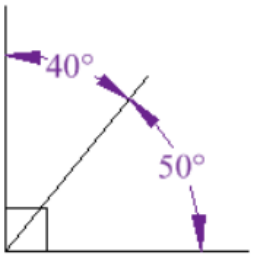




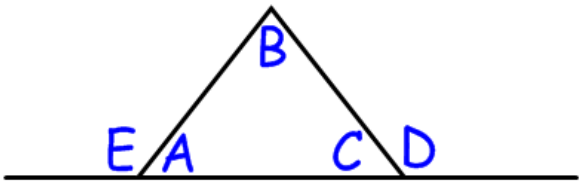
Complementary Angles

Two Angles are Complementary if they add up to 90 degrees (a Right Angle).





Angle Sum and Exterior Angle of Triangles



Triangles = all three angles must add up to 180

Angles A + B = Angle D

Angles B + C = Angle E

Rule: the two interior angles OPPOSITE the exterior angle of the triangle added together are equal the exterior angle.