## Sample Rules of The Flat Earth



## Definitions

sphere - a 3-dimensional solid consisting of all points a given distance from a center point.
point - an exact location in Space with no dimension
poles - two points directly opposite of one another on a sphere; the apex of a hemisphere
Great Circle - the longest line possible on a sphere, which divides the sphere into two equal hemispheres
geodesic - an arc segment of a great circle with two endpoints lune - a 2-sided spherical polygon formed by the intersection of two Great Circles

## Postulates

$>$ Post 1-1: There is exactly one great circle that lies exactly between two poles.
> Post 2-1: Between any two non-polar points on a sphere, there are exactly two distances.
> Post 2-2: A geodesic is the shortest distance connecting two points on a sphere.
> Post 3-1: Through any two non-polar points, exactly one great circle is possible.
> Post 3-2: Through any two polar points, there are an infinite number of great circles possible.
> Post 4-1: Two great circles intersect in exactly two "polar" points.
> Post 6-1: Through a non-polar point not on a great circle, there is one and exactly one great circle perpendicular to that great circle.

Post 6-2: Through a polar point not on a great circle, there are an infinite number of great circles perpendicular to that great circle.
> Post 7-1: There are no parallel great circles on a sphere.
$>$ Post 8-1: On a geodesic, if point $B$ lies between points $A$ and $C$, then $A B+B C=A C$.
> Post 9-1: A "polygon" on a sphere has two or more sides.
> Post 9-2: The intersection of two great circles creates four lunes.
> Post 9-3: On a sphere, the sum of a triangle's interior angles is always greater than $180^{\circ}$.

