

known 'facts'.

- 1) The sum of the angles of a triangle equals two right angles (180°).
- 2) The sum of the exterior angles of a triangle equals four right angles (360°).
- 3) The sum of the interior angles of a polygon equals $2n-4$ right angles, where n is the number of sides.
- 4) The sum of the exterior angles of any polygon equals four right angles (360°), regardless of the number of sides.
- 5) Three regular polygons - a triangle, a square, and a hexagon - fill the space about a point on a plane.

There is some question about the validity of these proofs, however. Not all of the 'facts' he assumed to prove them are valid. Non - Euclidean geometry, which is consistent and actually better describes Einsteinian spaces based on the assumption that his 'facts' are false (This discussion is essentially the same) as that of the parallel postulate²⁵ which I shall discuss much later in this paper.

Any discussion of Pythagoras must include his remarkable theories of numbers.

Pythagoras believed that all things - physical and mental, all nature and all ideas - are built on a pattern of integers. Fractions he did not consider numbers. They were only ratios, relations between numbers. Having discovered the figurate numbers,

24 George Gamow, One, Two, Three, Infinity, page 103

25 Pythagoras's proposition number one and Euclid's parallel postulate can each be proven from the other.