## 1 NUMBER THEORY

By Habel Mathewkutty .
Polyhedrons are Geometrical shapes enclosed by polygons. Numbers on them can be represented by Habel Math formula Akn $=2 \mathrm{k}(\mathrm{n}-1)+1$ Habelmath sum $=H k m=(m / 3) k(\mathrm{~m}-1)(2 \mathrm{~m}-1)+62+2(\mathrm{k}+1)+2(4 \mathrm{k}+1)+2(9 \mathrm{k}$ $+1)+2(16 \mathrm{k}+1)+\ldots \ldots \ldots+2(\mathrm{~m}-1) \mathrm{k}+1=\mathrm{H}$ where $\mathrm{H}=(\mathrm{m} / 3) \mathrm{k}(\mathrm{m}-1)(2 \mathrm{~m}-1)$ +6 Habel Math's wonderful formula for sum to m terms of all Polyhedral numbers. Remember $\mathrm{k}=1$ for Tetrahedron, and $\mathrm{k}=29$ for Soccerball because we know the soccerball numbers are $\mathrm{A} 29 \mathrm{n}=229(\mathrm{n}-1)+1$ They are 2, 60, 234, 524, $\qquad$ So H29m $=(\mathrm{m} / 3) 29(\mathrm{~m}-1)(2 \mathrm{~m}-1)+6$ When $\mathrm{m}=4$ it should be $2+60+234+524=820$ By Prof. Habel Mathewkutty M. Sc.(Math/Agra), Ph. D. Speaker of SIAM conference NW08 in Rome 2124 July 2008. Former Researcher of Indian Institutes of Technology and Instructor of Houston Community College System.

