Series 4.

Exercice 1

a) We construct a .STL approximation of a sphere. We obtain a polyhedric surface made of equiliateral triangles which all are identical. Show that the deviation height h is proportional to the area A of the triangles and ot the reciprocal of the radius R of the sphere:

$$h \simeq \frac{2}{3\sqrt{3}} \frac{A}{R}. \tag{1}$$

b) What happens if the triangles constituting the polyhedral surface are common triangles?