

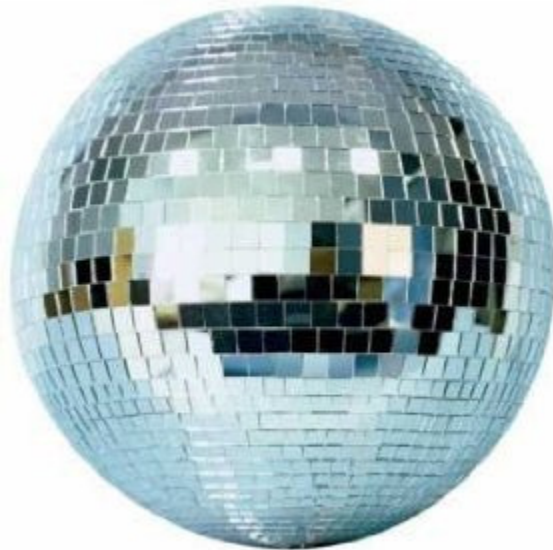
Area approximations and disco balls

For a sphere, the multivariable calculus approach to approximating surface area corresponds to covering a sphere with many small flat pieces, somewhat like the small mirrors on a disco ball.



(Source: <http://2grrlz.com/Images/Mini&MediumDiscoBalls300.jpg>)

If one covers the ball with smaller mirrors, then the surface of the disco ball looks more and more like the surface of a sphere.



(Source: <http://ecx.images-amazon.com/images/I/41BEZHTC13L. SL500 AA280 .jpg>)