



(u,v) to Cylindrical Coordinates

$$\varphi = 2\pi u$$

$$z = v$$

Cylindrical to Cartesian Coordinates

$$x = r \cos(\varphi)$$

$$y = r \sin(\varphi)$$

$$z = z$$

u goes around the cylinder and is periodic. The first and last u would be the same if we divided by (#slices-1), since the angle would be 0 and 2π .