

$$\int s^{\alpha} \sqrt{1-s^2}^{\beta} ds =$$

$$\int (\text{sen } \theta)^{\alpha} (\cos \theta)^{\beta} (\cos \theta) d\theta =$$

$$\int (\text{sen } \theta)^{\alpha} (\cos \theta)^{\beta+1} d\theta$$

$$\left[\begin{aligned} s &= \text{sen } \theta \\ \frac{ds}{d\theta} &= \cos \theta \\ ds &= \cos \theta d\theta \\ \sqrt{1-s^2} &= \sqrt{1-(\text{sen } \theta)^2} \\ &= \sqrt{(\cos \theta)^2} \\ &= \cos \theta \end{aligned} \right]$$