Concept Question 5-12: What is a sinc function and what are its primary properties? Why is sinc(0) = 1?

$$\text{sinc}(\theta) = \frac{\sin\theta}{\theta} \,. \qquad (5.79)$$

As defined by Eq. (5.79), sinc(θ) is an even function, and has zero-crossings at nonzero integer multiples of π. For small $\theta << 1$, sin(θ) is approximately θ (see Eq. (4.160a)), so sinc(θ) becomes $\theta/\theta = 1$.