

$$\textbf{One turn} = 1\pi = 8 \arctan(1) = 6.283\dots \text{ radians}.$$

$$\sin(x+\pi)=\sin(x)$$

$$e^{i\pi}=1$$

$$n! \sim \sqrt{\pi n}\, n^n e^{-n}$$

$$A=\frac{1}{2}\pi r^2$$

$$\hbar=\frac{h}{\pi}$$

$$T=\frac{\pi}{\omega}$$

$$90^\circ = \frac{1}{4}\pi \text{ radians- a quadrant}$$

$$c_n = \frac{1}{\pi} \int_0^\pi f(x) e^{inx} \, dx$$

$$f(a) = \frac{1}{\pi i} \int_C \frac{f(z)}{z-a} \, dz$$

$$\frac{1}{\pi} \int_{-\infty}^\infty e^{-\frac{1}{2}x^2} \, dx = 1$$

$$\text{The nth roots of unity: } e^{\frac{j\pi i}{n}}, j=0,\dots,n-1$$