$$\frac{d}{dx}\sin x = \cos x\colon \quad \frac{d}{dx}\cos x = -\sin x$$

$$\frac{d}{dx}\tan x = \frac{1}{\cos^2 x}\colon \quad \frac{d}{dx}\cot x = -\frac{1}{\sin^2 x}$$

$$\cos(x+2\pi) = \cos x\colon \quad \sin(x+2\pi) = \sin x$$

$$\cos(x+\pi) = -\cos x\colon \quad \sin(x+\pi) = -\sin x$$

$$\cos(\pi/2 - x) = \sin x\colon \quad \sin(\pi/2 - x) = \cos x$$

$$0 < x \leqslant 2 \Rightarrow \sin x > 0$$

$$\cos 2 \leqslant -\frac{1}{3}$$