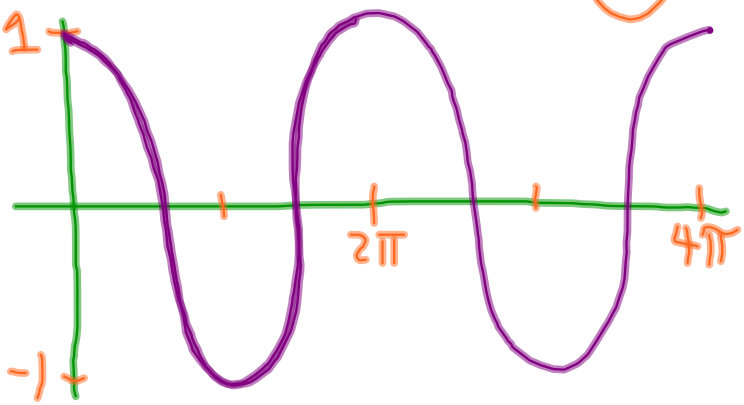
Section 7.6-cont.: Graphs of Sin & Cos

$y = \sin x$

$y = \cos x$



We graph trig functions in Radians

$$y = \pm a \underline{\sin/\cos}(\pm bx - c) + d$$

flip(x) flip(y) Horiz. Shift Vert. Shift

$|a|$ = amplitude

$\frac{2\pi}{b}$ = Period

Horiz. Shift
⊕ left
⊖ right

Vert. Shift
⊕ up
⊖ down

$y = 5\cos 2x$ amp = 5 Per = $\frac{2\pi}{2} = \pi$

$y = -3\sin\left(\frac{x}{3}\right)$ amp = 3 Per = $\frac{2\pi}{1/3} = 6\pi$

$y = \frac{2}{3}\cos\left(\frac{\pi x}{2}\right)$ amp = $\frac{2}{3}$ Period

$\frac{2\pi}{\pi/2} = \frac{2}{1/2}$

$= 4$