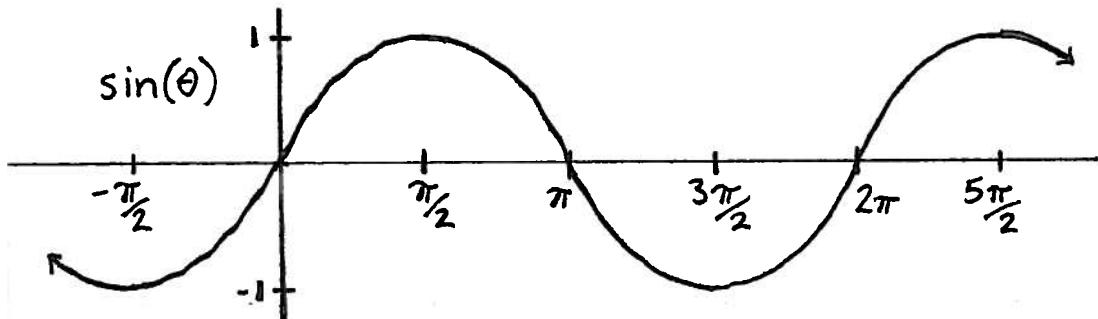
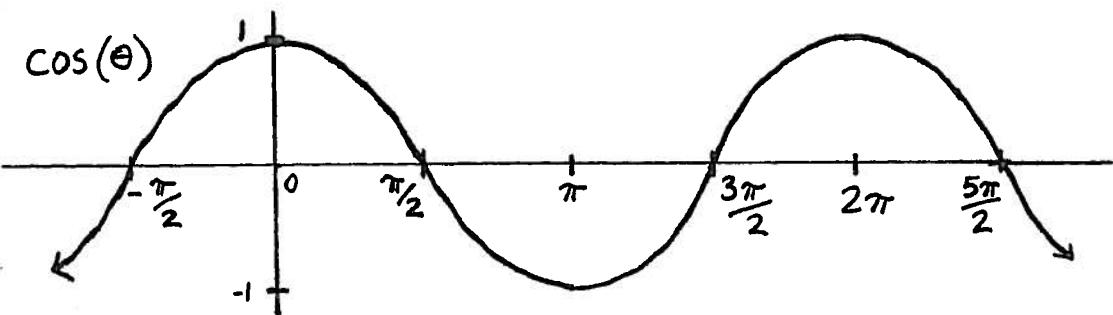


$$\text{wind}(\theta) = (\cos(\theta), \sin(\theta))$$

| θ | $\text{wind}(\theta)$ | $\cos(\theta)$ | $\sin(\theta)$ |
|-----------------|--|----------------------|----------------------|
| 0 | (1,0) | 1 | 0 |
| $\frac{\pi}{6}$ | $(\frac{\sqrt{3}}{2}, \frac{1}{2})$ | $\frac{\sqrt{3}}{2}$ | $\frac{1}{2}$ |
| $\frac{\pi}{4}$ | $(\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}})$ | $\frac{1}{\sqrt{2}}$ | $\frac{1}{\sqrt{2}}$ |
| $\frac{\pi}{3}$ | $(\frac{1}{2}, \frac{\sqrt{3}}{2})$ | $\frac{1}{2}$ | $\frac{\sqrt{3}}{2}$ |
| $\frac{\pi}{2}$ | (0,1) | 0 | 1 |



Identities

- | | | |
|---|--|--|
| ① $\cos^2(\theta) + \sin^2(\theta) = 1$ | ④ $\cos(\theta + \pi) = -\cos(\theta)$ | ⑦ $\sin(-\theta) = -\sin(\theta)$ |
| ② $\sin(\theta + \frac{\pi}{2}) = \cos(\theta)$ | ⑤ $\sin(\theta + \pi) = -\sin(\theta)$ | ⑧ $\cos(\theta + 2\pi) = \cos(\theta)$ |
| ③ $\cos(\theta - \frac{\pi}{2}) = \sin(\theta)$ | ⑥ $\cos(-\theta) = \cos(\theta)$ | ⑨ $\sin(\theta + 2\pi) = \sin(\theta)$ |