

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

Nedenfor er et antal nyttige formler vedrørende de trigonometriske funktioner $\cos(\theta)$ og $\sin(\theta)$.

$$\cos^2(\theta) + \sin^2(\theta) = 1. \quad (1)$$

$$\cos(\theta_1 + \theta_2) = \cos(\theta_1) \cos(\theta_2) - \sin(\theta_1) \sin(\theta_2). \quad (2)$$

$$\sin(\theta_1 + \theta_2) = \sin(\theta_1) \cos(\theta_2) + \cos(\theta_1) \sin(\theta_2). \quad (3)$$

$$\cos(2\theta) = \cos^2(\theta) - \sin^2(\theta) = 2 \cos^2(\theta) - 1 = 1 - 2 \sin^2(\theta). \quad (4)$$

$$\sin(2\theta) = 2 \sin(\theta) \cos(\theta). \quad (5)$$

$$\cos(\pi + \theta) = -\cos(\theta). \quad (6)$$

$$\sin(\pi + \theta) = -\sin(\theta). \quad (7)$$

$$\cos(\pi - \theta) = -\cos(\theta). \quad (8)$$

$$\sin(\pi - \theta) = \sin(\theta). \quad (9)$$

$$\cos\left(\frac{\pi}{2} - \theta\right) = \sin(\theta). \quad (10)$$

$$\sin\left(\frac{\pi}{2} - \theta\right) = \cos(\theta). \quad (11)$$

$$\cos(-\theta) = \cos(\theta). \quad (12)$$

$$\sin(-\theta) = -\sin(\theta). \quad (13)$$

Arne Jensen