

$$\cos(\pi - \theta)$$

$$\therefore \cos(a - b) = \cos a \cos b + \sin a \sin b$$

$$\cos(\pi - \theta) = \cos \pi \cos \theta + \sin \pi \sin \theta$$

$$= (-1) \cos \theta + (0) \sin \theta$$

$$\cos(\pi - \theta) = -\cos \theta$$
