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

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

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

$$\sin\left(\tfrac{\pi}{2} - (a+b)\right) = 1 \cdot \cos(-(a+b))$$

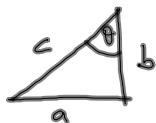$$\sin\left(\tfrac{\pi}{2} - (a+b)\right) = \cos$$

$$\cos(a+b) = \sin\left(\tfrac{\pi}{2} - (a+b)\right)$$

$$= \sin\left(\left(\tfrac{\pi}{2} - a\right) + (-b)\right)$$

$$= \sin\left(\tfrac{\pi}{2} - a\right)\cos(-b) + \cos\left(\tfrac{\pi}{2} - a\right)\sin(-b)$$

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

$$a^2 + b^2 = c^2$$

$$\left(\tfrac{a}{c}\right)^2 + \left(\tfrac{b}{c}\right)^2 = 1$$

$$\sin(\theta) = \tfrac{a}{c}$$

$$\cos(\theta) = \tfrac{b}{c} \quad \checkmark$$