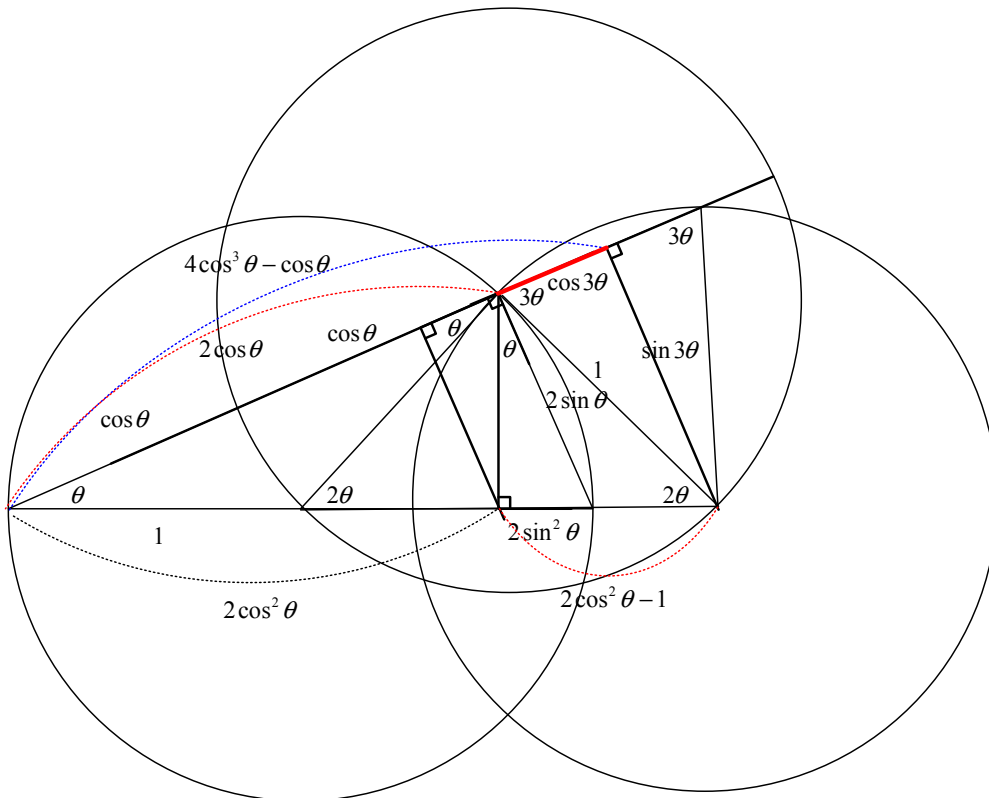
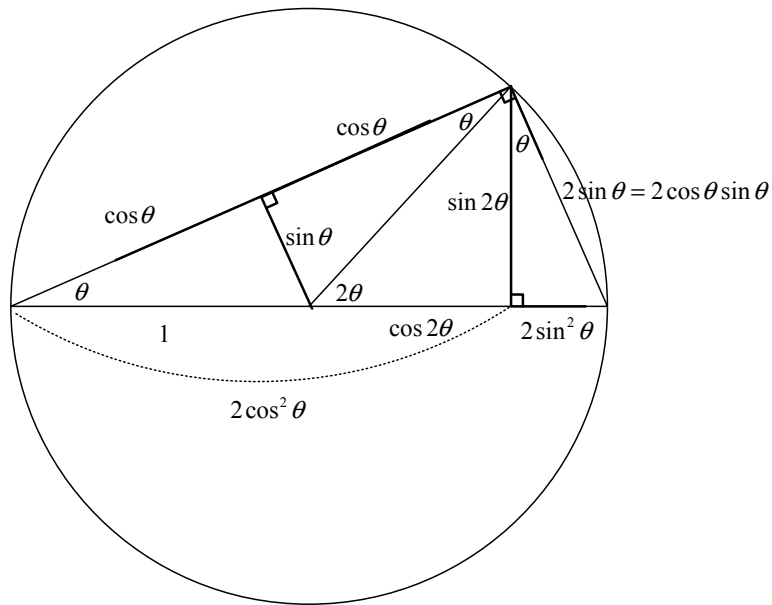


3 倍角公式 1000903 bee



$$\cos 3\theta = (4\cos^3 \theta - \cos \theta) - 2\cos \theta = 4\cos^3 \theta - 3\cos \theta \circ$$

$$\begin{aligned} \sin 3\theta &= (4\cos^3 \theta - \cos \theta) \cdot \tan \theta = (4\cos^3 \theta - \cos \theta) \cdot \frac{\sin \theta}{\cos \theta} = (4\cos^2 \theta - 1)\sin \theta \\ &= 4(1 - \sin^2 \theta)\sin \theta = 4\sin \theta - \sin^3 \theta \circ \end{aligned}$$

$$\begin{aligned} \sin 3\theta &= -\cos(270^\circ - 3\theta) = -\cos(3 \cdot (90^\circ - \theta)) = -(4\cos^3(90^\circ - \theta) - 3\cos(90^\circ - \theta)) \\ &= 3\sin \theta - 4\sin^3 \theta \circ \end{aligned}$$