No.
Date

演習

(1). $\int_{\alpha}^{2\pi+\alpha} \sin 2\theta \cos 3\theta \, d\theta$

$= \int_{0}^{2\pi} \frac{1}{2}(\sin 5\theta + \sin\theta)\, d\theta$

$= \frac{1}{2}\left[-\frac{1}{5}\cos 5\theta - \cos\theta\right]_{0}^{2\pi}$

$= \frac{1}{2}\left(-\frac{1}{5} - \left(-\frac{1}{5}\right) - 1 - (-1)\right)$

$= \boxed{0}$

(2). $\int_{\alpha}^{2\pi+\alpha} \sin 2\theta \sin 2\theta \, d\theta$

$= \int_{0}^{2\pi} \sin^2 2\theta \, d\theta$

$= \int_{0}^{2\pi} \frac{1-\cos 4\theta}{2} d\theta$

$= \left[\frac{\theta}{2} - \frac{1}{8}\sin 4\theta\right]_{0}^{2\pi}$

$= \boxed{\pi}$