

1.  $\int_{-\pi/2}^{2\pi} (4 \cos(2x) + 9 \sin(3x)) \, dx = -3$

2.  $\int_{3\pi}^{4\pi} (2 \cos(2x)) \, dx = 0$

3.  $\int_0^{3\pi} (4 \sin(4x)) \, dx = 0$