Samples   **Integrals**

1. Evaluate $\displaystyle\int_{-\pi/2}^{2\pi} \left(4\cos\left(2x\right) + 9\sin\left(3x\right)\right) dx$

2. Evaluate $\displaystyle\int_{3\pi}^{4\pi} \left(2\cos\left(2x\right)\right) dx$

3. Evaluate $\displaystyle\int_{0}^{3\pi} \left(4\sin\left(4x\right)\right) dx$