

DZ (6)

Izračunaj integral:

$$1. \int \cos 5x \cdot \sin 3x \, dx \quad (\text{rj: } \frac{\cos 2x}{4} - \frac{\cos 8x}{16} + C)$$

$$2. \int \cos 4x \cdot \cos 2x \, dx \quad (\text{rj: } \frac{\sin 2x}{2} + C)$$

$$3. \int \sin^3 x \cdot \cos^2 x \, dx \quad (\text{rj: } -\frac{\cos^3 x}{3} - \frac{\cos^5 x}{5} + C)$$

$$4. \int \sin x \cdot \cos^3 x \, dx \quad (\text{rj: } -\frac{\cos 2x}{2} - \frac{1}{8} \cos 4x + C)$$

$$5. \int \sin^4 x \, dx \quad (\text{rj: } \frac{3}{8}x - \frac{1}{4} \sin 2x + \frac{1}{32} \sin 4x + C)$$

$$6. \int \sin^2 x \cdot \cos^2 x \, dx \quad (\text{rj: } \frac{x}{8} - \frac{\sin 4x}{32} + C)$$