

$$1. \int 7^{\operatorname{ctg} x} \frac{dx}{\sin^2 x}$$

$$3. \int \cos 9x \cos 11x \, dx$$

$$5. \int \operatorname{arctg} x \, dx$$

$$7. \int \frac{x^2 + 1}{x^3 - x^2} \, dx$$

$$9. \int \frac{dx}{4\cos^2 x + \sin^2 x}$$

$$2. \int \frac{dx}{\sqrt{\ln x} \, x}$$

$$4. \int x \cos 7x \, dx$$

$$6. \int \frac{(x - 10) \, dx}{x^2 + 4x - 12}$$

$$8. \int \frac{\cos x + \cos^3 x}{\sqrt[7]{\sin x}} \, dx$$

$$10. \int (x + 2) \sqrt{8x + 1} \, dx$$