

## Definite integral

### Homework

**№1.** Compute the integrals:

$$1. \int_{-4}^3 (4 - x) \, dx;$$

$$6. \int_0^{0.5} \frac{12 \, dx}{(4x - 3)^4};$$

$$2. \int_{-2}^0 (x^2 + 6x) \, dx;$$

$$7. \int_4^{49} \left( \frac{4}{\sqrt{x}} - 1 \right) \, dx;$$

$$3. \int_{-1}^2 (16x^3 + 9x^2 - 12x + 1) \, dx;$$

$$8. \int_1^{13} \frac{dx}{\sqrt{6x + 3}};$$

$$4. \int_{-5}^{-1} (x + 2)^2 \, dx;$$

$$9. \int_{-4}^{16} \frac{dx}{\sqrt{8 - \frac{x}{4}}};$$

$$5. \int_{-1.5}^{-1} (6x + 5)^5 \, dx;$$

$$10. \int_{-\pi/2}^{\pi/3} \sin x \, dx;$$