

$$1847. \int \frac{dx}{\sqrt{1-2x-x^2}}. \quad 1848. \int \frac{ax}{\sqrt{x+x^2}},$$

$$1849. \int \frac{dx}{\sqrt{2x^2-x+2}}.$$

1850. Доказать, что если

$$y = ax^2 + bx + c \quad (a \neq 0),$$

то

$$\int \frac{dx}{\sqrt{y}} = \frac{1}{\sqrt{a}} \ln \left| \frac{y'}{2} + \sqrt{ay} \right| + C \quad \text{при } a > 0$$

и

$$\int \frac{dx}{\sqrt{y}} = \frac{1}{\sqrt{-a}} \arcsin \frac{-y'}{\sqrt{b^2-4ac}} + C \quad \text{при } a < 0.$$

$$1851. \int \frac{x dx}{\sqrt{5+x-x^2}}. \quad 1852. \int \frac{x+1}{\sqrt{x^2+x+1}} dx.$$

$$1853. \int \frac{x dx}{\sqrt{1-3x^2-2x^4}}.$$

$$1853.1. \int \frac{\cos x dx}{\sqrt{1+\sin x+\cos^2 x}}.$$

$$1854. \int \frac{x^2 dx}{\sqrt{x^4-2x^2-1}}.$$

$$1855. \int \frac{x+x^3}{\sqrt{1+x^2-x^4}} dx.$$

$$1856. \int \frac{dx}{x\sqrt{x^2+x+1}}.$$

$$1857. \int \frac{dx}{x^2\sqrt{x^2+x-1}}.$$

$$1858. \int \frac{dx}{(x+1)\sqrt{x^2+1}}.$$

$$1859. \int \frac{dx}{(x-1)\sqrt{x^2-2}}.$$

$$1860. \int \frac{dx}{(x+2)^2\sqrt{x^2+2x-5}}.$$

$$1861. \int \sqrt{2+x-x^2} dx. \quad 1862. \int \sqrt{2+x+x^2} dx.$$