

(1)

a) $\int \frac{\cosh 2x}{5 \sinh^3 2x} dx = ?$ b) $\int \frac{\cosh 2x}{5 \sinh 2x} dx = ?$

c) $\int x^2 \sqrt{4x^3 - \pi} dx = ?$ d) $\int \frac{e^{3x} - 2}{e^{5x}} dx = ?$

(2)

a) $\int \arcsin(5x) dx = ?$ b) $\int \frac{e^x + 1}{(e^x - 3)(e^x + 2)} dt = ?$

(3)

a) $\int \frac{1}{(1 + 9x^2)} e^{\arctan 3x} dx = ?$

b) $\int_0^1 \frac{1}{(1 + 9x^2)} e^{\arctan 3x} dx = ?$ c) $\int_0^\infty \frac{1}{(1 + 9x^2)} e^{\arctan 3x} dx = ?$

(4)

a) $\int_0^1 (x + 3) \sin(\pi x) dx = ?$ b) $\int_0^{\frac{\operatorname{arcosh} 2}{5}} \frac{\sinh 5x}{\sqrt{\cosh 5x}} dx = ?$

(5)

a) $\int \frac{x + 1}{(x + 2)(x - 3)} dx = ?$ b) $\int \frac{2x + 6}{x^2 + 4x + 13} dx = ?$

(6)

Vezesse be az $x = \frac{1}{3} \sin t$ új változót, majd határozza meg az alábbi integrált:

$$\int \sqrt{1 - 9x^2} dx = ?$$