

## Урок 7. Метод введения под знак дифференциала :

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|---|--|
| 1703. $\int \sin x d(\sin x).$  | 1704. $\int \operatorname{tg}^3 x d(\operatorname{tg} x).$     |
| 1705. $\int \frac{d(1+x^2)}{\sqrt{1+x^2}}.$                           | 1706. $\int (x+1)^{15} dx.$                                    |
| 1707. $\int \frac{dx}{(2x-3)^5}.$                                     | 1708. $\int \frac{dx}{(a+bx)^c} (c \neq 1).$                   |
| 1709. $\int \sqrt[5]{(8-3x)^6} dx.$                                   | 1710. $\int \sqrt{8-2x} dx.$                                   |
| 1711. $\int \frac{m}{\sqrt[3]{(a+bx)^2}} dx.$                         | 1712. $\int 2x\sqrt{x^2+1} dx.$                                |
| 1713. $\int x\sqrt{1-x^2} dx.$  | 1714. $\int x^{25}\sqrt{x^3+2} dx.$                            |
| 1715. $\int \frac{x dx}{\sqrt{x^2+1}}.$                               | 1716. $\int \frac{x^4 dx}{\sqrt{4+x^5}}.$                      |
| 1717. $\int \frac{x^3 dx}{\sqrt[3]{x^4+1}}.$                          | 1718. $\int \frac{(6x-5)dx}{2\sqrt{3x^2-5x+6}}.$               |
| 1719. $\int \sin^3 x \cos x dx.$                                      | 1720. $\int \frac{\sin x dx}{\cos^2 x}.$                       |
| 1721. $\int \frac{\cos x dx}{\sqrt[3]{\sin^2 x}}.$                    | 1722. $\int \cos^3 x \sin 2x dx.$                              |
| 1723. $\int \frac{\sqrt{\ln x}}{x} dx.$                               | 1724. $\int \frac{(\operatorname{arctg} x)^2 dx}{1+x^2}.$      |
| 1725. $\int \frac{dx}{(\arcsin x)^3 \sqrt{1-x^2}}.$                   | 1726. $\int \frac{dx}{\cos^2 x \sqrt{1+\operatorname{tg} x}}.$ |
| 1727. $\int \cos 3x d(3x).$   | 1728. $\int \frac{d(1+\ln x)}{\cos^2(1+\ln x)}.$               |
| 1729. $\int \cos 3x dx.$  | 1730. $\int (\cos \alpha - \cos 2x) dx.$                       |
| 1731. $\int \sin(2x-3) dx.$   | 1732. $\int \cos(1-2x) dx.$                                    |
| 1733. $\int \left[ \cos\left(2x - \frac{\pi}{4}\right) \right]^2 dx.$ | 1734. $\int e^x \sin(e^x) dx.$                                 |
| 1735. $\int \frac{d(1+x^2)}{1+x^2}.$                                  | 1736. $\int \frac{d(\arcsin x)}{\arcsin x}.$                   |
| 1737. $\int \frac{(2x-3)dx}{x^2-3x+8}.$                               |  |