

Integration of composite functions

Homework

№1. For the function f find an antiderivative F whose graph passes through the given point:

1. $f(x) = 10x^9 - \frac{4}{x}, \quad M(1, 2);$

3. $f(x) = \frac{1}{4x-1} - e^{-3x}, \quad M(0, 1);$

2. $f(x) = \frac{12}{3x+2}, \quad M(2, \ln 8);$

4. $f(x) = \frac{5}{x+3} - \frac{7}{2\sqrt{x+18}}, \quad M(-2, -30).$