# Indefinite integral example

Calculate indefinite integral of function below

$$\int \frac{2}{3 \cdot x + 1} \cdot dx$$

$$\int \frac{2}{3 \cdot x + 1} \cdot dx = \left\{ \begin{matrix} 3 \cdot x + 1 = t \\ 3 \cdot dx = dt \\ dx = \frac{dt}{3} \end{matrix} \right\} =$$

$$= \int \frac{2}{t} \cdot \frac{dt}{3} =$$

$$= \frac{2}{3} \cdot \int \frac{1}{t} \cdot dt =$$

$$= \frac{2}{3} \cdot \ln|t| + C =$$

$$= \frac{2}{3} \cdot \ln|3 \cdot x + 1| + C$$