Integration - Logarithmic Rule and Exponentials

Evaluate each indefinite integral.

$$1) \int x^{-1} dx$$

$$2) \int 3x^{-1} dx$$

$$3) \int -\frac{1}{x} \, dx$$

4)
$$\int \frac{1}{x} dx$$

$$5) \int -e^x dx$$

6)
$$\int e^x dx$$

$$7) \int 2 \cdot 3^x \, dx$$

$$8) \int 3 \cdot 5^x \, dx$$

Integration - Logarithmic Rule and Exponentials

Evaluate each indefinite integral.

$$1) \int x^{-1} dx$$

$$\ln |x| + C$$

$$2) \int 3x^{-1} dx$$
$$3 \ln |x| + C$$

3)
$$\int -\frac{1}{x} dx$$
$$-\ln |x| + C$$

$$4) \int \frac{1}{x} dx$$

$$\ln |x| + C$$

$$5) \int -e^x dx$$
$$-e^x + C$$

$$6) \int e^x dx$$

$$e^x + C$$

$$7) \int 2 \cdot 3^x \, dx$$

$$\frac{2 \cdot 3^x}{\ln 3} + C$$

$$8) \int 3 \cdot 5^x dx$$

$$\frac{3 \cdot 5^x}{\ln 5} + C$$