

Hwk d/dx and integrate using e, euler's number

Date _____ Period _____

Differentiate each function with respect to x .

1) $y = e^{x^5}$

2) $y = e^{2x^2}(2x^5 - 5)$

3) $y = \frac{2x^2 - 1}{e^{3x^5}}$

Evaluate each indefinite integral.

4) $\int 3e^x dx$

5) $\int 18x^2 e^{3x^3 + 4} dx$

6) $\int e^{2x} \cdot 8e^{e^{2x} - 5} dx$

Evaluate each definite integral.

7) $\int_{-3}^{-2} -2e^{2x+4} dx$

8) $\int_{-3}^0 e^x dx$