

Solve for x

$$\ln(x - 4) - \ln x = \ln 4$$

Find the inverse and its domain

$$f(x) = \sqrt{3x + 4}$$

Find y'

$$y = \ln[(2 + x^2)^5(x - 3)]$$

Find $f'(x)$

$$f(x) = \sqrt{e^{2x} + 5}$$

Find the area in the 1st quadrant bounded by

$$f(x) = \frac{9 - x^2}{x}, \quad \text{the x-axis, } x = 0.1 \text{ and } x = 1$$

$$\int \frac{2x}{3x^2 + 4} dx$$

$$\int_e^{4e} \frac{1}{x} dx$$

Use logarithmic differentiation to find $f'(x)$

$$f(x) = x^3 (\sin x) e^x$$

Find y'

$$ye^y = x$$

Find y'

$$\ln(xy) = x + y$$

$$\int 3e^{4x} dx$$

$$\int \frac{2x^2 - x + 2}{x - 1} dx$$

$$\int \frac{3e^{4x} + 1}{e^{2x}} dx$$

$$\int \frac{\ln(2x)}{x} dx$$

Find the area under $y = e^{2x}$, bounded by $x = -1$, $x = 1$, and the x- axis