

Product and Quotient Rule Dominoes

START	$y = x^2 \ln x$
$\frac{dy}{dx} = 2x^2 e^{2x} + 2x e^{2x}$	$y = x \ln x^2$
$\frac{dy}{dx} = x^2 \cos x + 2x \sin x$	$y = x \cos x$
$\frac{dy}{dx} = 1 + \ln x$	$y = x e^{2x}$
$\frac{dy}{dx} = x^2 e^x + 2x e^x$	$y = x^2 \ln 2x$
$\frac{dy}{dx} = 1 + \ln 2x$	$y = 2x e^x$
$\frac{dy}{dx} = 2x^2 e^{x^2} + e^{x^2}$	$y = x^2 e^x$

$$\frac{dy}{dx} = x + 2x \ln 2x$$

$$y = x \ln x$$

$$\frac{dy}{dx} = -2x \sin 2x + \cos 2x$$

$$y = x \sin 2x$$

$$\frac{dy}{dx} = 2x^2 \cos 2x + 2x \sin 2x$$

$$y = x \ln 2x$$

$$\frac{dy}{dx} = -x \sin x + \cos x$$

$$y = x^2 \cos x$$

$$\frac{dy}{dx} = -2x^2 \sin 2x + 2x \cos 2x$$

$$y = x \cos 2x$$

$$\frac{dy}{dx} = 2 + \ln x^2$$

$$y = x^2 \ln x^2$$

$$\frac{dy}{dx} = x \cos x + \sin x$$

$$y = x^2 \sin x$$

$$\frac{dy}{dx} = 2x + 2x \ln x^2$$

END

$$\frac{dy}{dx} = 2xe^{2x} + e^{2x}$$

$$y = x^2 e^{2x}$$

$$\frac{dy}{dx} = -x^2 \sin x + 2x \cos x$$

$$y = x^2 \cos 2x$$

$$\frac{dy}{dx} = x + 2x \ln x$$

$$y = x \sin x$$

$$\frac{dy}{dx} = 2x \cos 2x + \sin 2x$$

$$y = x^2 \sin 2x$$

$$\frac{dy}{dx} = 2xe^x + 2e^x$$

$$y = xe^{x^2}$$