

Найдем производную функции:

$$\frac{\cos(x^{(\sin x)^x}) \cdot \cos x}{x} \quad (1)$$

$$\frac{\partial}{\partial y} \left( \frac{\cos(x^{(\sin x)^x}) \cdot \cos x}{x} \right) \quad (2)$$

$$\frac{\frac{\partial}{\partial y}(\cos(x^{(\sin x)^x}) \cdot \cos x) \cdot x - \cos(x^{(\sin x)^x}) \cdot \cos x \cdot \frac{\partial}{\partial y}(x)}{x^2} \quad (3)$$

$$\frac{\partial}{\partial y}(\cos(x^{(\sin x)^x}) \cdot \cos x) \quad (4)$$

$$\frac{\partial}{\partial y}(\cos(x^{(\sin x)^x})) \cdot \cos x + \cos(x^{(\sin x)^x}) \cdot \frac{\partial}{\partial y}(\cos x) \quad (5)$$

$$\frac{\partial}{\partial y}(\cos(x^{(\sin x)^x})) \quad (6)$$

$$(-1) \cdot \sin(x^{(\sin x)^x}) \cdot \frac{\partial}{\partial y}(x^{(\sin x)^x}) \quad (7)$$

$$\frac{\partial}{\partial y}(x^{(\sin x)^x}) \quad (8)$$

$$x^{(\sin x)^x} \cdot \left( \frac{\partial}{\partial y}((\sin x)^x) \cdot \ln x + \frac{(\sin x)^x \cdot \frac{\partial}{\partial y}(x)}{x} \right) \quad (9)$$

$$\frac{\partial}{\partial y}((\sin x)^x) \quad (10)$$

$$(\sin x)^x \cdot \left( \frac{\partial}{\partial y}(x) \cdot \ln(\sin x) + \frac{x \cdot \frac{\partial}{\partial y}(\sin x)}{\sin x} \right) \quad (11)$$

$$\frac{\partial}{\partial y}(x) \quad (12)$$

$$0 \quad (13)$$

$$\frac{\partial}{\partial y}(\sin x) \quad (14)$$

$$\cos x \cdot \frac{\partial}{\partial y}(x) \quad (15)$$

$$\frac{\partial}{\partial y}(x) \quad (16)$$

$$0 \quad (17)$$

$$\frac{\partial}{\partial y}(x) \quad (18)$$

$$0 \quad (19)$$

$$\frac{\partial}{\partial y}(\cos x) \quad (20)$$

$$(-1) \cdot \sin x \cdot \frac{\partial}{\partial y}(x) \quad (21)$$

$$\frac{\partial}{\partial y}(x) \quad (22)$$

$$0 \quad (23)$$

$$\frac{\partial}{\partial y}(x) \quad (24)$$

$$0 \quad (25)$$

$$\frac{((-1) \cdot \sin(x^{(\sin x)^x}) \cdot x^{(\sin x)^x} \cdot ((\sin x)^x \cdot (0 \cdot \ln(\sin x) + \frac{x \cdot \cos x \cdot 0}{\sin x}) \cdot \ln x + \frac{(\sin x)^x \cdot 0}{x}) \cdot \cos x + \cos(x^{(\sin x)^x}) \cdot (-1))}{x^2} \quad (26)$$

$$\frac{((-1) \cdot \sin(x^{(\sin x)^x}) \cdot x^{(\sin x)^x} \cdot ((\sin x)^x \cdot (0 \cdot \ln(\sin x) + \frac{x \cdot \cos x \cdot 0}{\sin x}) \cdot \ln x + \frac{(\sin x)^x \cdot 0}{x}) \cdot \cos x + \cos(x^{(\sin x)^x}) \cdot (-1))}{x^2} \quad (27)$$

После элементарных преобразований получаем:

$$-0 \quad (28)$$