

CrInGeCrInGe Production. Super cringe introduction here:
 Let's calculate smth with expression given: $f(x, y) =$

$$\frac{\sin x}{y + \cos \frac{1.000}{x}}$$

Firstly, let's insert all constants and simplify it:

$$\frac{\sin x}{y + \cos \frac{1.000}{x}}$$

BRITISH SCIENTISTS WERE SHOCKED, WHEN THEY COUNT IT!!! IN
 THE POINT ($x = 3.000$, $y = 1.000$)IT'S VALUE = 0.073 !!!

1 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

2 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

3 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

4 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

5 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

6 step: finding a derivation of function:

$$y + \cos \frac{1.000}{x}$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

7 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

8 step: finding a derivation of function:

$$\sin x$$

here it is:

$$\cos x$$

9 step: finding a derivation of function:

$$\frac{\sin x}{y + \cos \frac{1.000}{x}}$$

here it is:

$$\frac{\cos x \cdot (y + \cos \frac{1.000}{x}) - (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x}{(y + \cos \frac{1.000}{x})^{2.000}}$$

Congratulations! The first derivation of the expression is:

$$\frac{\cos x \cdot (y + \cos \frac{1.000}{x}) - (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x}{(y + \cos \frac{1.000}{x})^{2.000}}$$

IN THE POINT (x = 3.000, y = 1.000)IT'S VALUE = -0.548 !!!

Let's calculate the 3 derivation of the expression:

Calculating the 1 derivation of the expression:

1 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

2 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

3 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

4 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

5 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

6 step: finding a derivation of function:

$$y + \cos \frac{1.000}{x}$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

7 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

8 step: finding a derivation of function:

$$\sin x$$

here it is:

$$\cos x$$

9 step: finding a derivation of function:

$$\frac{\sin x}{y + \cos \frac{1.000}{x}}$$

here it is:

$$\frac{\cos x \cdot \left(y + \cos \frac{1.000}{x}\right) - (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x}{\left(y + \cos \frac{1.000}{x}\right)^{2.000}}$$

Calculating the 2 derivation of the expression:

1 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

2 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

3 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

4 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

5 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

6 step: finding a derivation of function:

$$\left(y + \cos \frac{1.000}{x}\right)$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

7 step: finding a derivation of function:

$$\left(y + \cos \frac{1.000}{x}\right)^{2.000}$$

here it is:

$$2.000 \cdot \left(y + \cos \frac{1.000}{x}\right) \cdot \left(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}\right)$$

8 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

9 step: finding a derivation of function:

$$\sin x$$

here it is:

$$\cos x$$

10 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

11 step: finding a derivation of function:

$$x^{2.000}$$

here it is:

$$2.000 \cdot x$$

12 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

13 step: finding a derivation of function:

$$\frac{(-1.000)}{x^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

14 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

15 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

16 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

17 step: finding a derivation of function:

$$\sin \frac{1.000}{x}$$

here it is:

$$\cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

18 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

19 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

20 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

21 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

22 step: finding a derivation of function:

$$(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

23 step: finding a derivation of function:

$$(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x$$

here it is:

$$((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}) \cdot \sin x + \cos x$$

24 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

25 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

26 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

27 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

28 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

29 step: finding a derivation of function:

$$(y + \cos \frac{1.000}{x})$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

30 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

31 step: finding a derivation of function:

$$\cos x$$

here it is:

$$(-1.000) \cdot \sin x$$

32 step: finding a derivation of function:

$$\cos x \cdot (y + \cos \frac{1.000}{x})$$

here it is:

$$(-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x$$

33 step: finding a derivation of function:

$$\cos x \cdot (y + \cos \frac{1.000}{x}) - (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x$$

here it is:

$$((-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x) - (((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x)$$

34 step: finding a derivation of function:

$$\frac{\cos x \cdot (y + \cos \frac{1.000}{x}) - (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x}{(y + \cos \frac{1.000}{x})^{2.000}}$$

here it is:

$$\frac{(((-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x) - (((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x))}{(y + \cos \frac{1.000}{x})^{2.000}}$$

Calculating the 3 derivation of the expression:

1 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

2 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

3 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

4 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

5 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

6 step: finding a derivation of function:

$$(y + \cos \frac{1.000}{x})$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

7 step: finding a derivation of function:

$$\left(\left(y + \cos \frac{1.000}{x} \right)^{2.000} \right)$$

here it is:

$$2.000 \cdot \left(y + \cos \frac{1.000}{x} \right) \cdot \left(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \right)$$

8 step: finding a derivation of function:

$$\left(\left(y + \cos \frac{1.000}{x} \right)^{2.000} \right)^{2.000}$$

here it is:

$$2.000 \cdot \left(y + \cos \frac{1.000}{x} \right)^{2.000} \cdot 2.000 \cdot \left(y + \cos \frac{1.000}{x} \right) \cdot \left(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \right)$$

9 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

10 step: finding a derivation of function:

$$\sin x$$

here it is:

$$\cos x$$

11 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

12 step: finding a derivation of function:

$$x^{2.000}$$

here it is:

$$2.000 \cdot x$$

13 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

14 step: finding a derivation of function:

$$\frac{(-1.000)}{x^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

15 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

16 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

17 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

18 step: finding a derivation of function:

$$\sin \frac{1.000}{x}$$

here it is:

$$\cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

19 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

20 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

21 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

22 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

23 step: finding a derivation of function:

$$(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

24 step: finding a derivation of function:

$$(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x$$

here it is:

$$((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}) \cdot \sin x +$$

25 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

26 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

27 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

28 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

29 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

30 step: finding a derivation of function:

$$(y + \cos \frac{1.000}{x})$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

31 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

32 step: finding a derivation of function:

$$\cos x$$

here it is:

$$(-1.000) \cdot \sin x$$

33 step: finding a derivation of function:

$$\cos x \cdot (y + \cos \frac{1.000}{x})$$

here it is:

$$(-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x$$

34 step: finding a derivation of function:

$$(\cos x \cdot (y + \cos \frac{1.000}{x}) - (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \sin x)$$

here it is:

$$((-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x) - (((-1.000) \cdot \cos \frac{1.000}{x}$$

35 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

36 step: finding a derivation of function:

$$x^{2.000}$$

here it is:

$$2.000 \cdot x$$

37 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

38 step: finding a derivation of function:

$$\frac{(-1.000)}{x^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

39 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

40 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

41 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

42 step: finding a derivation of function:

$$\sin \frac{1.000}{x}$$

here it is:

$$\cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

43 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

44 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

45 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

46 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

47 step: finding a derivation of function:

$$(1.000 + (-1.000)) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

48 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

49 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

50 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

51 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

52 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

53 step: finding a derivation of function:

$$(y + \cos \frac{1.000}{x})$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

54 step: finding a derivation of function:

$$2.000$$

here it is:

$$0.000$$

55 step: finding a derivation of function:

$$2.000 \cdot (y + \cos \frac{1.000}{x})$$

here it is:

$$2.000 \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

56 step: finding a derivation of function:

$$2.000 \cdot (y + \cos \frac{1.000}{x}) \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

here it is:

$$2.000 \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) + ((-1.000) \cdot \cos$$

57 step: finding a derivation of function:

$$2.000 \cdot (y + \cos \frac{1.000}{x}) \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (\cos x \cdot (y + \cos \frac{1.000}{x}) - (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}))$$

here it is:

$$(2.000 \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) + ((-1.000) \cdot \cos$$

58 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

59 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

60 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

61 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

62 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

63 step: finding a derivation of function:

$$(y + \cos \frac{1.000}{x})$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

64 step: finding a derivation of function:

$$(y + \cos \frac{1.000}{x})^{2.000}$$

here it is:

$$2.000 \cdot (y + \cos \frac{1.000}{x}) \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

65 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

66 step: finding a derivation of function:

$$x^{2.000}$$

here it is:

$$2.000 \cdot x$$

67 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

68 step: finding a derivation of function:

$$\frac{(-1.000)}{x^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

69 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

70 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

71 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

72 step: finding a derivation of function:

$$\sin \frac{1.000}{x}$$

here it is:

$$\cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

73 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

74 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

75 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

76 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

77 step: finding a derivation of function:

$$(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

78 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

79 step: finding a derivation of function:

$$\cos x$$

here it is:

$$(-1.000) \cdot \sin x$$

80 step: finding a derivation of function:

$$\cos x \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

here it is:

$$(-1.000) \cdot \sin x \cdot (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) + ((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} +$$

81 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

82 step: finding a derivation of function:

$$\sin x$$

here it is:

$$\cos x$$

83 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

84 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

85 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

86 step: finding a derivation of function:

$$\sin \frac{1.000}{x}$$

here it is:

$$\cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

87 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

88 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

89 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

90 step: finding a derivation of function:

$$(x^{2.000})$$

here it is:

$$2.000 \cdot x$$

91 step: finding a derivation of function:

$$(x^{2.000})^{2.000}$$

here it is:

$$2.000 \cdot x^{2.000} \cdot 2.000 \cdot x$$

92 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

93 step: finding a derivation of function:

$$2.000$$

here it is:

$$0.000$$

94 step: finding a derivation of function:

$$2.000 \cdot x$$

here it is:

$$2.000$$

95 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

96 step: finding a derivation of function:

$$(-1.000) \cdot 2.000 \cdot x$$

here it is:

$$-2.000$$

97 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

98 step: finding a derivation of function:

$$(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x$$

here it is:

$$2.000$$

99 step: finding a derivation of function:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

here it is:

$$\frac{2.000 \cdot (x^{2.000})^{2.000} - 2.000 \cdot x^{2.000} \cdot 2.000 \cdot x \cdot (-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{((x^{2.000})^{2.000})^{2.000}}$$

100 step: finding a derivation of function:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

here it is:

$$\frac{2.000 \cdot (x^{2.000})^{2.000} - 2.000 \cdot x^{2.000} \cdot 2.000 \cdot x \cdot (-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{((x^{2.000})^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x} + (-1.000)$$

101 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

102 step: finding a derivation of function:

$$x^{2.000}$$

here it is:

$$2.000 \cdot x$$

103 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

104 step: finding a derivation of function:

$$\frac{(-1.000)}{x^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

105 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

106 step: finding a derivation of function:

$$x^{2.000}$$

here it is:

$$2.000 \cdot x$$

107 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

108 step: finding a derivation of function:

$$\frac{(-1.000)}{x^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

109 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

110 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

111 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

112 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

113 step: finding a derivation of function:

$$\cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot \cos \frac{1.000}{x}$$

114 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

115 step: finding a derivation of function:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot ((-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot \cos \frac{1.000}{x})$$

116 step: finding a derivation of function:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot ((-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot \cos \frac{1.000}{x}) \cdot \frac{(-1.000)}{x^{2.000}}$$

117 step: finding a derivation of function:

$$((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x})$$

here it is:

$$(-1.000) \cdot ((-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot \cos \frac{1.000}{x}) \cdot \frac{(-1.000)}{x^{2.000}}$$

118 step: finding a derivation of function:

$$((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}) \cdot \sin x$$

here it is:

$$((-1.000) \cdot ((-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot \cos \frac{1.000}{x}) \cdot \frac{(-1.000)}{x^{2.000}})$$

119 step: finding a derivation of function:

$$(((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}) \cdot \sin x +$$

here it is:

$$((-1.000) \cdot ((-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot \cos \frac{1.000}{x}) \cdot \frac{(-1.000)}{x^{2.000}}$$

120 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

121 step: finding a derivation of function:

$$\cos x$$

here it is:

$$(-1.000) \cdot \sin x$$

122 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

123 step: finding a derivation of function:

$$x^{2.000}$$

here it is:

$$2.000 \cdot x$$

124 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

125 step: finding a derivation of function:

$$\frac{(-1.000)}{x^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}}$$

126 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

127 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

128 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

129 step: finding a derivation of function:

$$\sin \frac{1.000}{x}$$

here it is:

$$\cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

130 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

131 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

132 step: finding a derivation of function:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

133 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

134 step: finding a derivation of function:

$$(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}})$$

here it is:

$$(-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}$$

135 step: finding a derivation of function:

$$(1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x$$

here it is:

$$((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \frac{(-1.000)}{x^{2.000}} + \frac{(-1.000) \cdot (-1.000) \cdot 2.000 \cdot x}{(x^{2.000})^{2.000}} \cdot (-1.000) \cdot \sin \frac{1.000}{x}) \cdot \cos x +$$

136 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

137 step: finding a derivation of function:

$$1.000$$

here it is:

$$0.000$$

138 step: finding a derivation of function:

$$\frac{1.000}{x}$$

here it is:

$$\frac{(-1.000) \cdot 1.000}{x^{2.000}}$$

139 step: finding a derivation of function:

$$\cos \frac{1.000}{x}$$

here it is:

$$(-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

140 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

141 step: finding a derivation of function:

$$(y + \cos \frac{1.000}{x})$$

here it is:

$$1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}$$

142 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

143 step: finding a derivation of function:

$$\sin x$$

here it is:

$$\cos x$$

144 step: finding a derivation of function:

$$(-1.000)$$

here it is:

$$0.000$$

145 step: finding a derivation of function:

$$(-1.000) \cdot \sin x$$

here it is:

$$(-1.000) \cdot \cos x$$

146 step: finding a derivation of function:

$$(-1.000) \cdot \sin x \cdot \left(y + \cos \frac{1.000}{x}\right)$$

here it is:

$$(-1.000) \cdot \cos x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (-1.000) \cdot \sin x$$

147 step: finding a derivation of function:

$$((-1.000) \cdot \sin x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x)$$

here it is:

$$(-1.000) \cdot \cos x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (-1.000) \cdot \sin x + ((-1.000) \cdot \cos x)$$

148 step: finding a derivation of function:

$$(((-1.000) \cdot \sin x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x) - (((-1.000) \cdot \cos x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (-1.000) \cdot \sin x + ((-1.000) \cdot \cos x)))$$

here it is:

$$((-1.000) \cdot \cos x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (-1.000) \cdot \sin x + ((-1.000) \cdot \cos x)) - (((-1.000) \cdot \sin x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x) - (((-1.000) \cdot \cos x \cdot \left(y + \cos \frac{1.000}{x}\right) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (-1.000) \cdot \sin x + ((-1.000) \cdot \cos x)))$$

$$(((-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot (\frac{ -1.000}{x^{2.000}})) \cdot \cos x) - (((-1.000) \cdot \cos \frac{1.000}{x}$$
$$(((-1.000) \cdot \cos x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (-1.000) \cdot \sin x + ((-1.000)$$
$$(((-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot (\frac{ -1.000}{x^{2.000}})) \cdot \cos x) - (((-1.000) \cdot \cos \frac{1.000}{x}$$
$$((((-1.000) \cdot \cos x \cdot (y + \cos \frac{1.000}{x})) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot (-1.000) \cdot \sin x + ((-1.000)$$
$$(((-1.000) \cdot \sin x \cdot (y + \cos \frac{1.000}{x}) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x) - (((-1.000) \cdot \cos \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) + ((-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}}) \cdot \cos x) \cdot \cos x) \cdot \cos x$$
$$(((((-1.000) \cdot \cos x \cdot (y + \cos \frac{1.000}{x})) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot (\frac{-1.000}{x^{2.000}})) \cdot (-1.000) \cdot \sin x + ((-1.000) \cdot \cos$$
$$(((((-1.000) \cdot \cos x \cdot (y + \cos \frac{1.000}{x})) + (1.000 + (-1.000) \cdot \sin \frac{1.000}{x} \cdot (\frac{(-1.000)}{x^{2.000}})) \cdot (-1.000) \cdot \sin x + ((-1.000) \cdot$$
$$\frac{\cos x \cdot (1.000 + \cos \frac{1.000}{x}) - (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^2.000} \cdot \sin x}{(1.000 + \cos \frac{1.000}{x})^{2.000}}$$

31

Partial derivation of the expression on the variable 'y':

$$\frac{(-0.141)}{(y + 0.945)^{2.000}}$$

IN THE POINT (x = 3.000, y = 1.000) IT'S VALUE = -0.037305 !!!

Full derivation:

$$\sqrt{\left(\frac{\cos x \cdot (1.000 + \cos \frac{1.000}{x}) - (-1.000) \cdot \sin \frac{1.000}{x} \cdot \frac{(-1.000)}{x^{2.000}} \cdot \sin x}{(1.000 + \cos \frac{1.000}{x})^{2.000}}\right)^{2.000} + \left(\frac{(-0.141)}{(y + 0.945)^{2.000}}\right)^{2.000}}$$

IN THE POINT (x = 3.000, y = 1.000) IT'S VALUE = 0.512 !!!

Let's consider the expression as a function of x variable: f(x) =

$$\frac{\sin x}{1.000 + \cos \frac{1.000}{x}}$$

Maklorens formula for x near to 3.000000:

$$0.073 + (-0.510) \cdot (x - 3.000) + (-0.026) \cdot (x - 3.000)^{2.000} + 0.080 \cdot (x - 3.000)^{3.000} + 0.003 \cdot (x - 3.000)^{4.000}$$

And remainig member is o maloe from:

$$(x - 3.000)^{4.000}$$

Graph f(x):

Tangent equation in point -2.000: f(x) =

$$(-0.253) \cdot (x - (-2.000)) + (-0.484)$$

Normal equation in point -2.000: f(x) =

$$3.960 \cdot (x - (-2.000)) + (-0.484)$$