

Let's calculate smth with expression given:

$$(5.000^{(x-3.000)}) \cdot \ln x$$

Calculating the first derivation of it:

1 step: finding a derivation of funtion:

$$3.000$$

here it is:

$$0.000$$

2 step: finding a derivation of funtion:

$$x$$

here it is:

$$1.000$$

3 step: finding a derivation of funtion:

$$(x - 3.000)$$

here it is:

$$1.000$$

4 step: finding a derivation of funtion:

$$(5.000^{(x-3.000)})$$

here it is:

$$1.609 \cdot (5.000^{(x-3.000)})$$

5 step: finding a derivation of funtion:

$$x$$

here it is:

$$1.000$$

6 step: finding a derivation of funtion:

$$\ln x$$

here it is:

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

7 step: finding a derivation of funtion:

$$(5.000^{(x-3.000)}) \cdot \ln x$$

here it is:

$$((5.000^{(x-3.000)}) \cdot \frac{1.000}{x} + \ln x \cdot 1.609 \cdot (5.000^{(x-3.000)}))$$

Thus, the first derivation:

$$((5.000^{(x-3.000)}) \cdot \frac{1.000}{x} + \ln x \cdot 1.609 \cdot (5.000^{(x-3.000)}))$$

Calculating the second derivation of it:

1 step: finding a derivation of funtion:

$$x$$

here it is:

$$1.000$$

2 step: finding a derivation of funtion:

$$\ln x$$

here it is:

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

3 step: finding a derivation of funtion:

$$1.609$$

here it is:

$$0.000$$

4 step: finding a derivation of funtion:

$$3.000$$

here it is:

$$0.000$$

5 step: finding a derivation of funtion:

$$x$$

here it is:

$$1.000$$

6 step: finding a derivation of funtion:

$$(x - 3.000)$$

here it is:

$$1.000$$

7 step: finding a derivation of funtion:

$$(5.000^{(x-3.000)})$$

here it is:

$$1.609 \cdot (5.000^{(x-3.000)})$$

8 step: finding a derivation of funtion:

$$1.609 \cdot (5.000^{(x-3.000)})$$

here it is:

$$1.609 \cdot 1.609 \cdot (5.000^{(x-3.000)})$$

9 step: finding a derivation of funtion:

$$\ln x \cdot 1.609 \cdot (5.000^{(x-3.000)})$$

here it is:

$$(\ln x \cdot 1.609 \cdot 1.609 \cdot (5.000^{(x-3.000)}) + 1.609 \cdot (5.000^{(x-3.000)}) \cdot \frac{1.000}{x})$$

10 step: finding a derivation of funtion:

$$3.000$$

here it is:

$$0.000$$

11 step: finding a derivation of funtion:

$$x$$

here it is:

$$1.000$$

12 step: finding a derivation of funtion:

$$(x - 3.000)$$

here it is:

$$1.000$$

13 step: finding a derivation of funtion:

$$(5.000^{(x-3.000)})$$

here it is:

$$1.609 \cdot (5.000^{(x-3.000)})$$

14 step: finding a derivation of funtion:

$$x$$

$$3$$

here it is:

$$1.000$$

15 step: finding a derivation of funtion:

$$1.000$$

here it is:

$$0.000$$

16 step: finding a derivation of funtion:

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

here it is:

$$\frac{(0.000 - 1.000)}{(x^{2.000})}$$

17 step: finding a derivation of funtion:

$$(5.000^{(x-3.000)}) \cdot \frac{1.000}{x}$$

here it is:

$$((5.000^{(x-3.000)}) \cdot \frac{-1.000}{(x^{2.000})} + \frac{1.000}{x} \cdot 1.609 \cdot (5.000^{(x-3.000)}))$$

18 step: finding a derivation of funtion:

$$((5.000^{(x-3.000)}) \cdot \frac{1.000}{x} + \ln x \cdot 1.609 \cdot (5.000^{(x-3.000)}))$$

here it is:

$$(((5.000^{(x-3.000)}) \cdot \frac{-1.000}{(x^{2.000})} + \frac{1.000}{x} \cdot 1.609 \cdot (5.000^{(x-3.000)})) + (\ln x \cdot 1.609 \cdot 1.609 \cdot (5.000^{(x-3.000)}) + 1.609$$

Thus, the second derivation:

$$(((5.000^{(x-3.000)}) \cdot \frac{-1.000}{(x^{2.000})} + \frac{1.000}{x} \cdot 1.609 \cdot (5.000^{(x-3.000)})) + (\ln x \cdot 1.609 \cdot 1.609 \cdot (5.000^{(x-3.000)}) + 1.609$$