

# The final work on informatics

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1) Source function:

$$f(x) = (2 * x)^2$$

2) After differentiation:

$$f'(x) = 2 * (2 * x)^{(2-1)} * (0 * x + 2 * 1)$$

3) First optimization (delete constant):

$$f'(x) = 2 * (2 * x)^1 * (0 * x + 2)$$

4) Second optimization (delete not meaning number):

$$f'(x) = 2 * 2 * x * (0 + 2)$$

5) Finish result (after combined two optimization):

$$\boxed{f'(x) = 2 * 2 * x * 2}$$

## References:

- 1) *Kernighan B., Ritchie D.* The C Programming Language (second edition)
- 2) *Knuth D.E.* The Art of Computer Programming
- 3) *Lvovsky S.M.* Set and layout of the system LATEX