The final work on informatics

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1) Source function:

$$f(x) = \frac{(x-2)^3}{(x-6)^2}$$

2) After differentiation:

$$f'(x) = \frac{3 * (x-2)^{(3-1)} * (1-0) * (x-6)^2 - (x-2)^3 * 2 * (x-6)^{(2-1)} * (1 -}{(x-6)^{2^2}}$$

3) First optimization (delete constant):

$$f'(x) = \frac{3 * (x-2)^2 * 1 * (x-6)^2 - (x-2)^3 * 2 * (x-6)^1 * 1}{(x-6)^{2^2}}$$

4) Second optimization (delete not meaning number):

$$f'(x) = \frac{3 * (x-2)^2 * (x-6)^2 - (x-2)^3 * 2 * (x-6)}{(x-6)^{2^2}}$$

5) Finish result (after combined two optimization):

$$\boxed{f'(x) = \frac{3 * (x-2)^2 * (x-6)^2 - (x-2)^3 * 2 * (x-6)}{(x-6)^{2^2}}}$$

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