## **DERIVATION**

## dermaker v1.0

## February 4, 2017

derivation this:

 $x^6$ 

getting derivative 1 order:

 $1*6*x^{(6-1)}$ 

collapsing constants:

 $1*6*x^5$ 

dropping nulls and etc...:

 $6 * x^5$ 

using diving algorytm:

 $6 * x^5$ 

derivation this:

 $6 * x^5$ 

getting derivative 2 order:

 $6 * 1 * 5 * x^{(5-1)} + x^5 * 0$ 

collapsing constants:

 $6*1*5*x^4+x^5*0$ 

dropping nulls and etc...:

 $6 * 5 * x^4$ 

using diving algorytm:

 $30 * x^4$ 

derivation this:

 $30 * x^4$ 

getting derivative 3 order:

$$30 * 1 * 4 * x^{(4-1)} + x^4 * 0$$

collapsing constants:

$$30 * 1 * 4 * x^3 + x^4 * 0$$

dropping nulls and etc...:

$$30 * 4 * x^3$$

using diving algorytm:

$$120 * x^3$$

derivation this:

$$120 * x^3$$

getting derivative 4 order:

$$120 * 1 * 3 * x^{(3-1)} + x^3 * 0$$

collapsing constants:

$$120 * 1 * 3 * x^2 + x^3 * 0$$

dropping nulls and etc...:

$$120 * 3 * x^2$$

using diving algorytm:

$$360 * x^2$$

derivation this:

$$360 * x^2$$

getting derivative 5 order:

$$360 * 1 * 2 * x^{(2-1)} + x^2 * 0$$

collapsing constants:

$$360 * 1 * 2 * x^1 + x^2 * 0$$

dropping nulls and etc...:

$$360 * 2 * x$$

using diving algorytm:

$$720 * x$$

As result:

$$720 * x$$