**Чорноморський державний університет ім. Петра Могили**

**Кафедра прикладної та вищої математики**

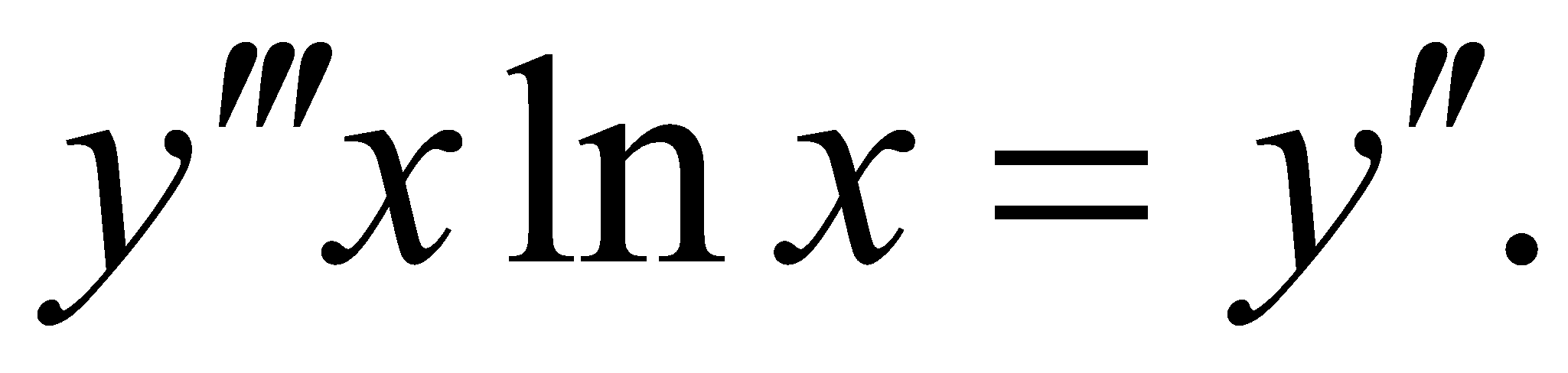
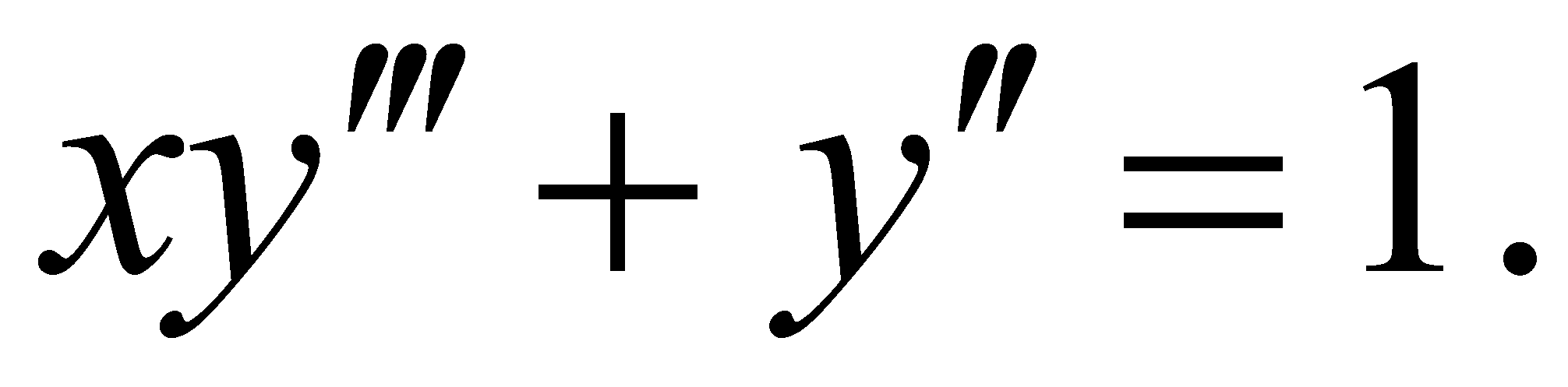
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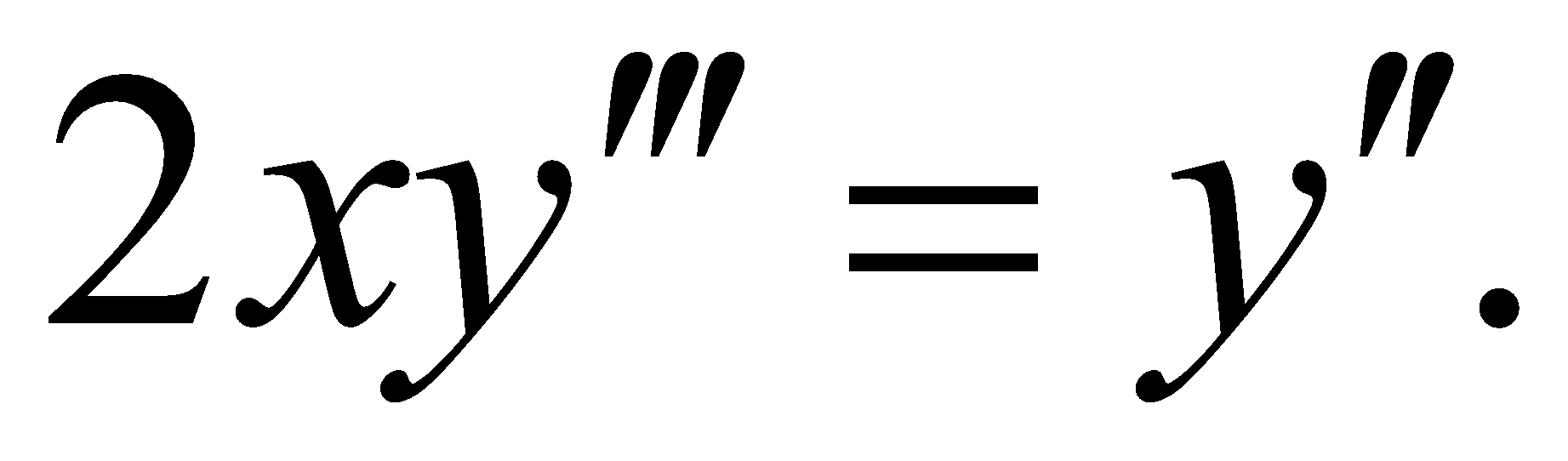
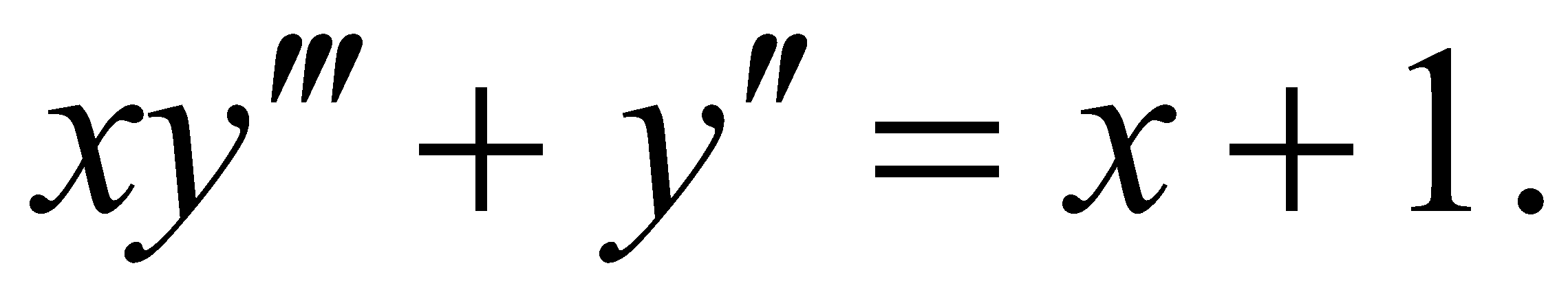
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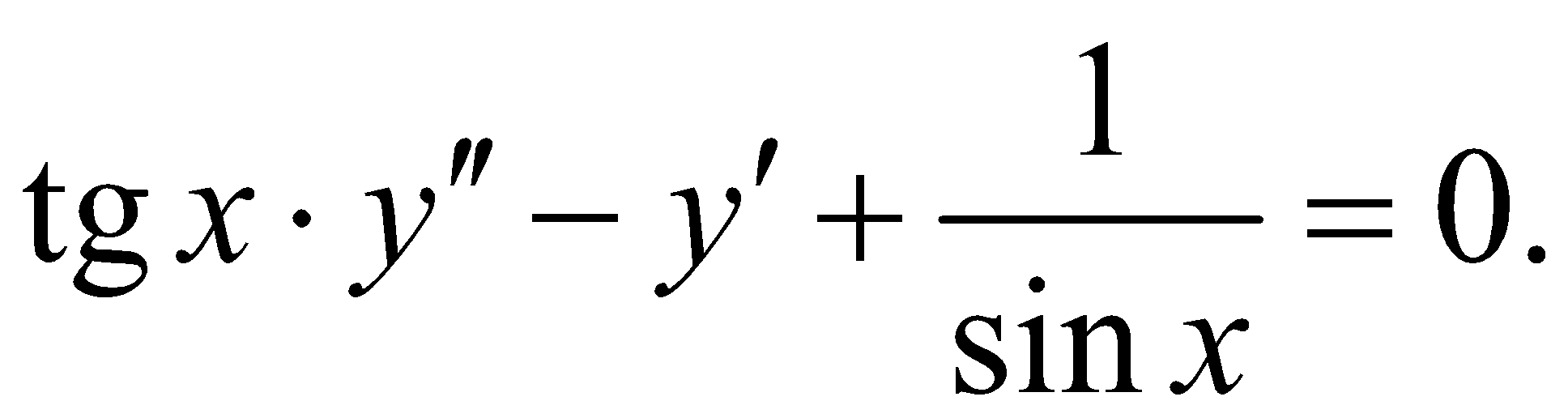
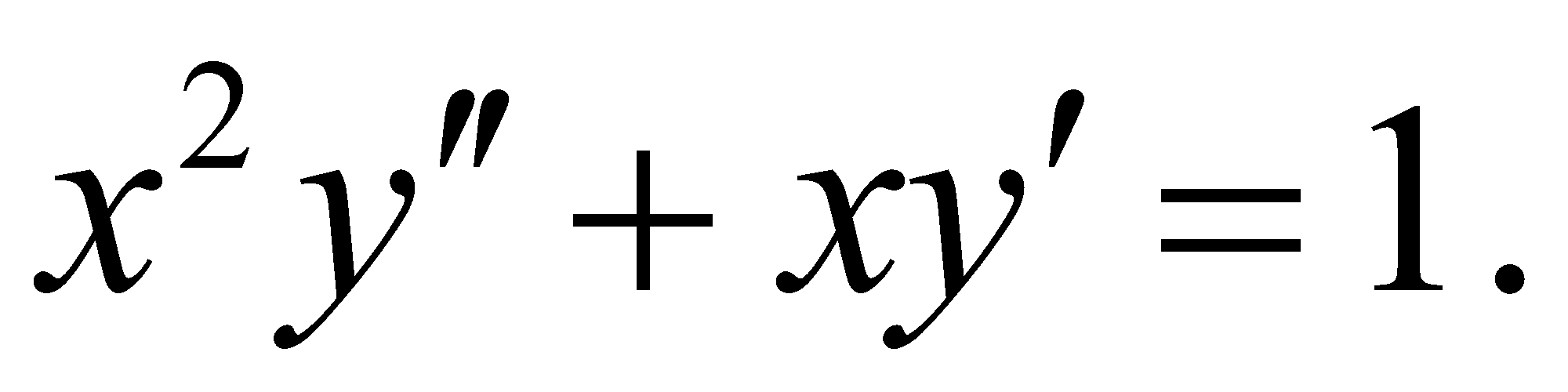
*Тема:* ***Диференціальні рівняння вищих прорядків.***

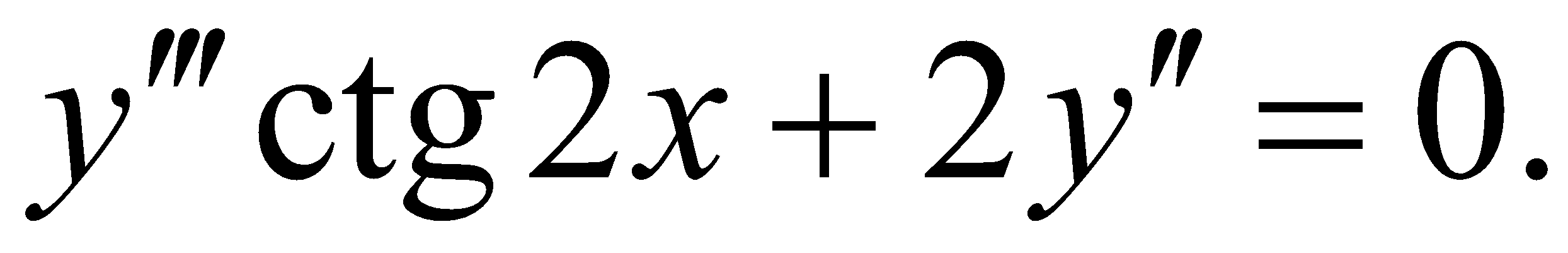
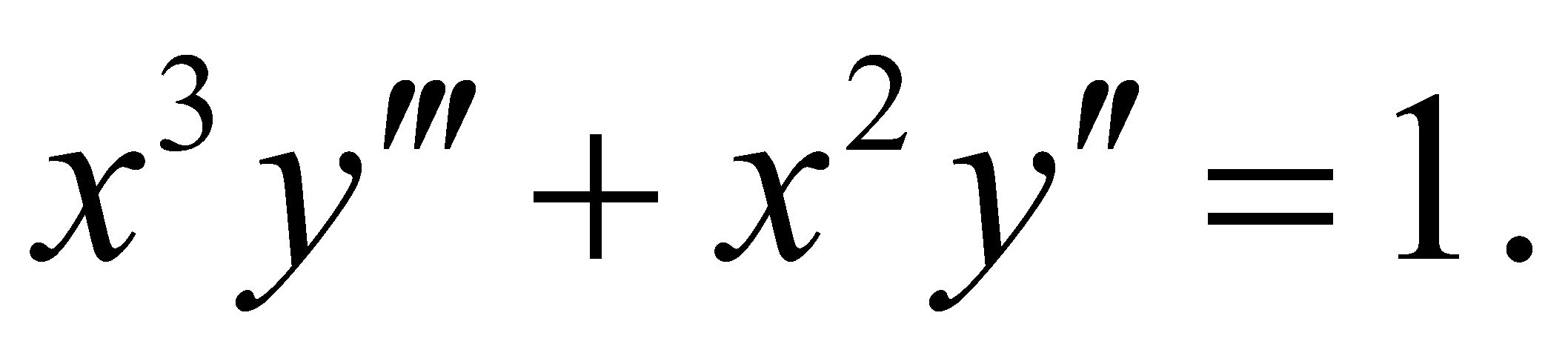
**Викладачі: доцент Воробйова А.І.**

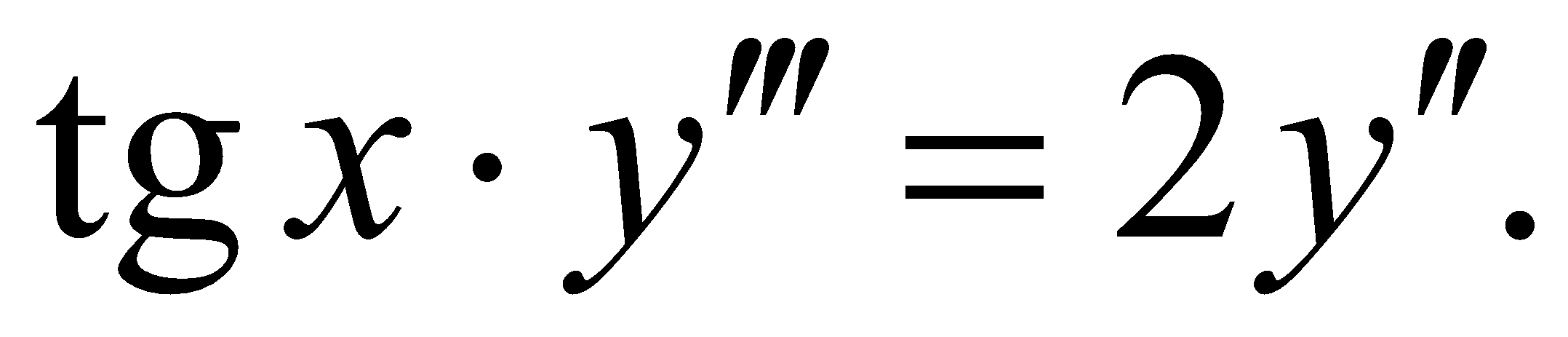
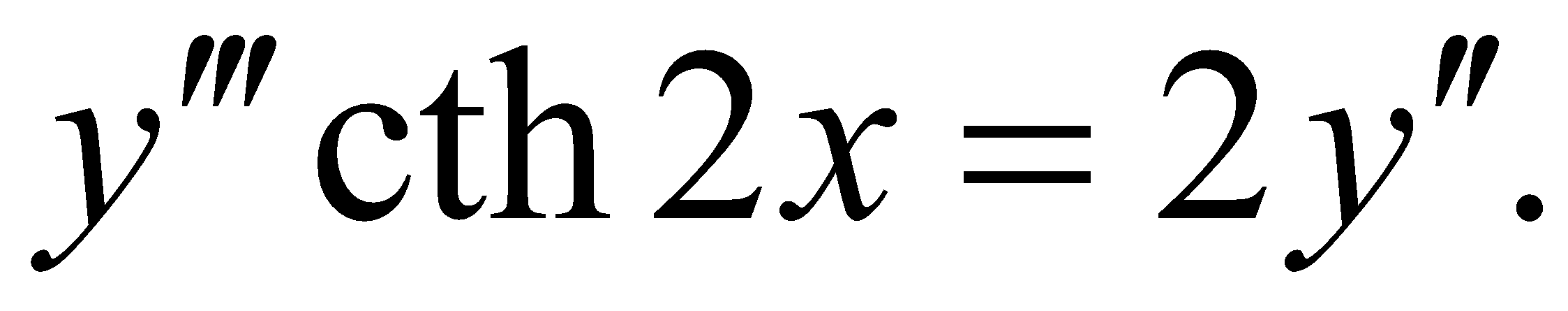
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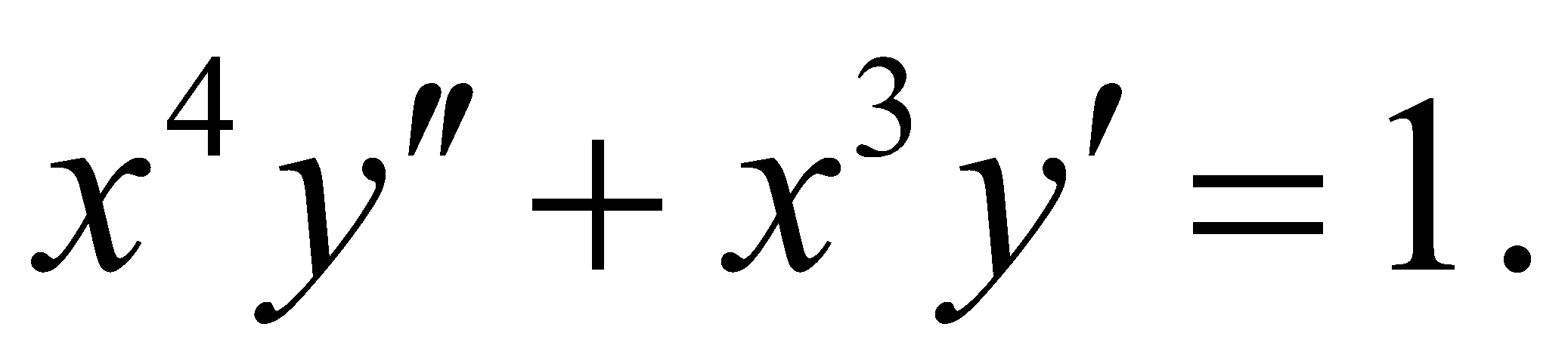
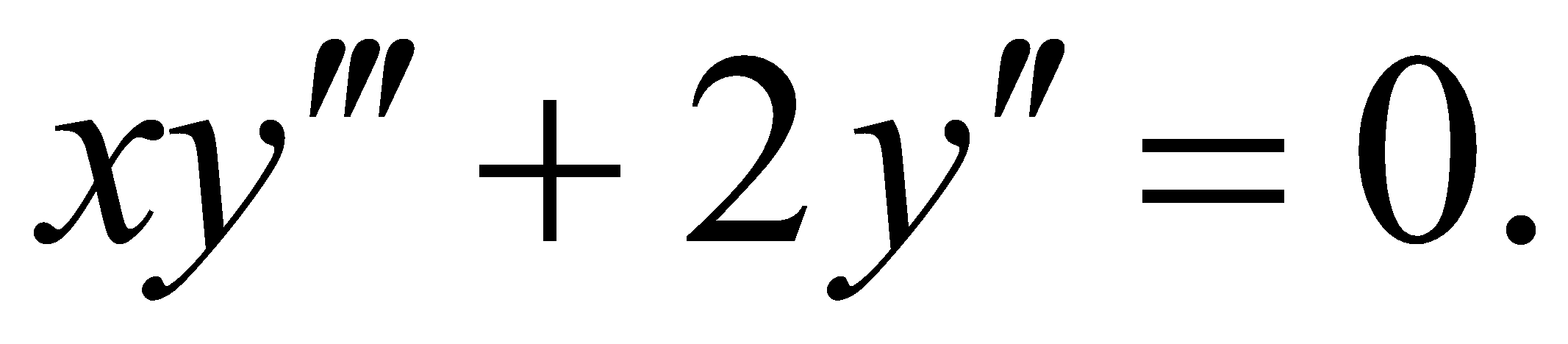
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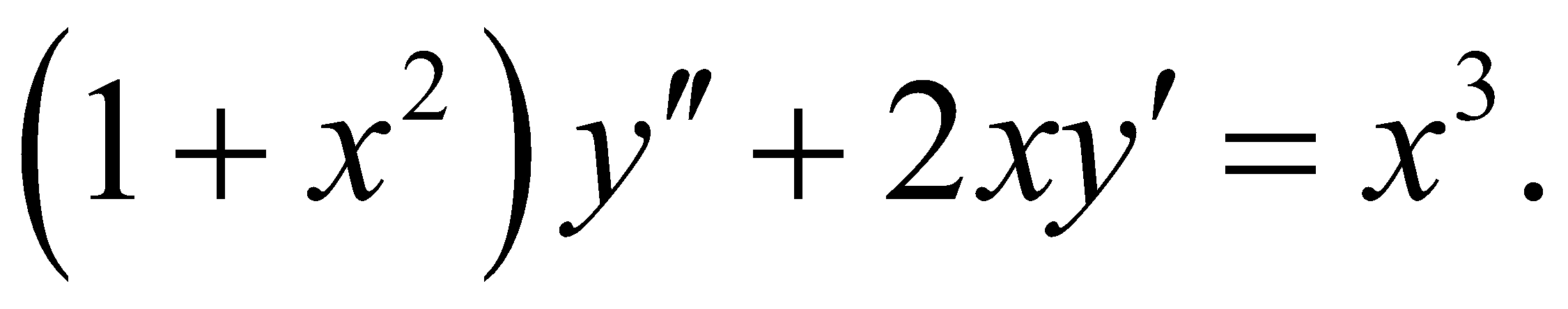
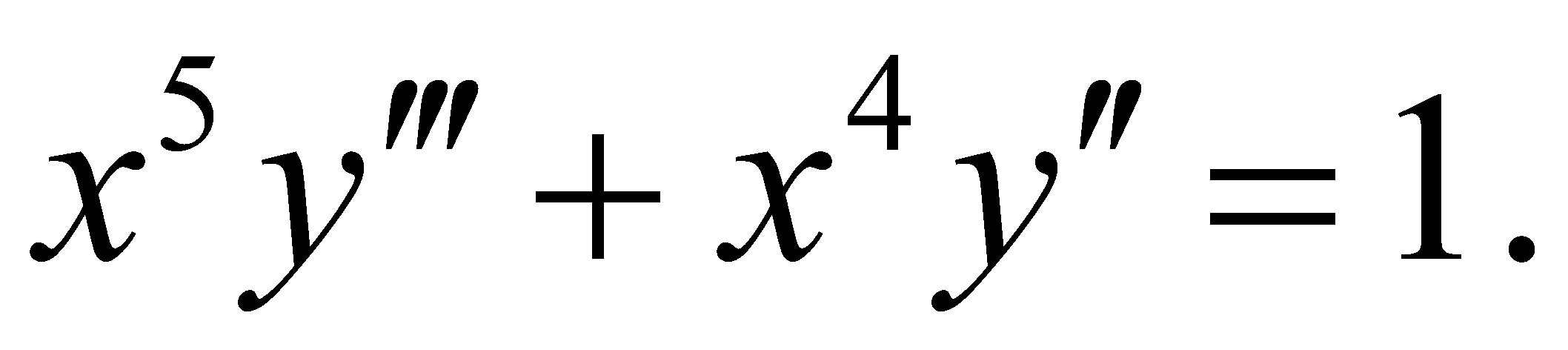
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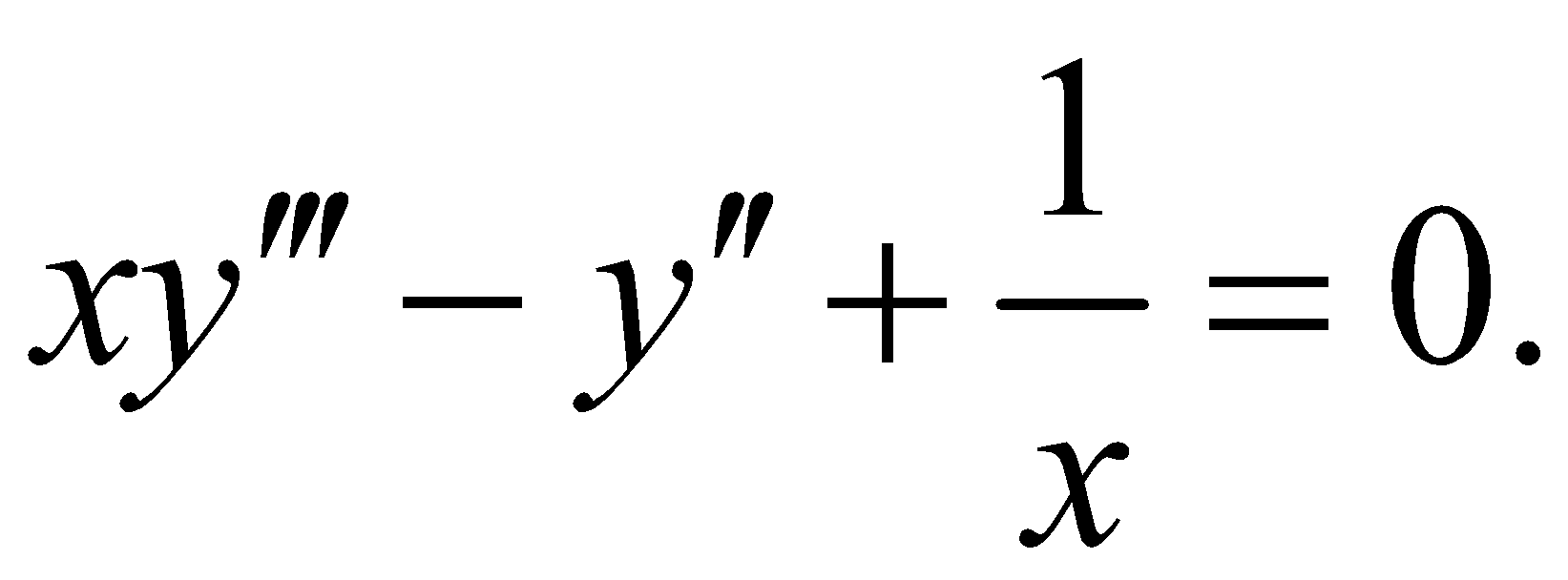
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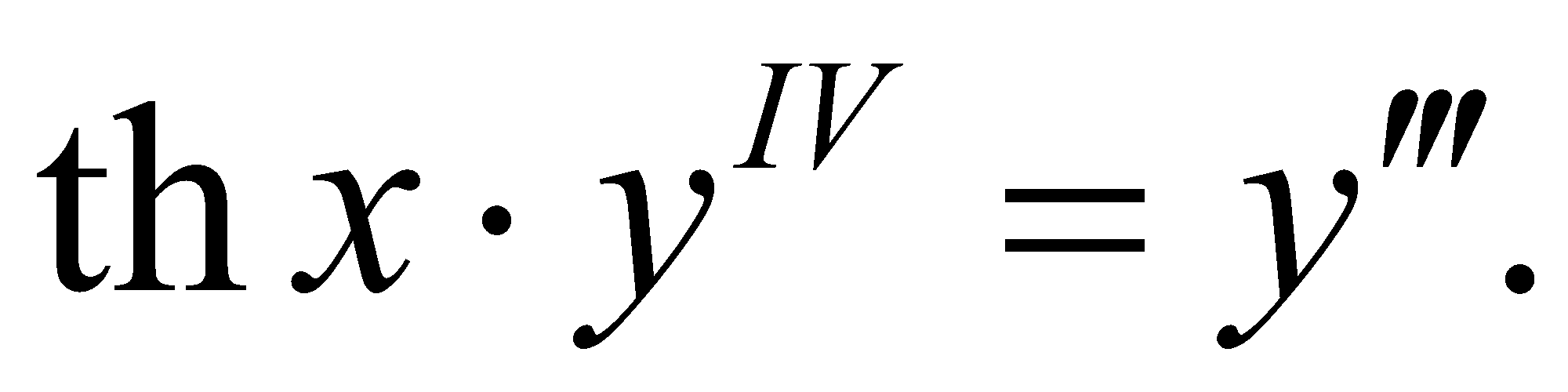
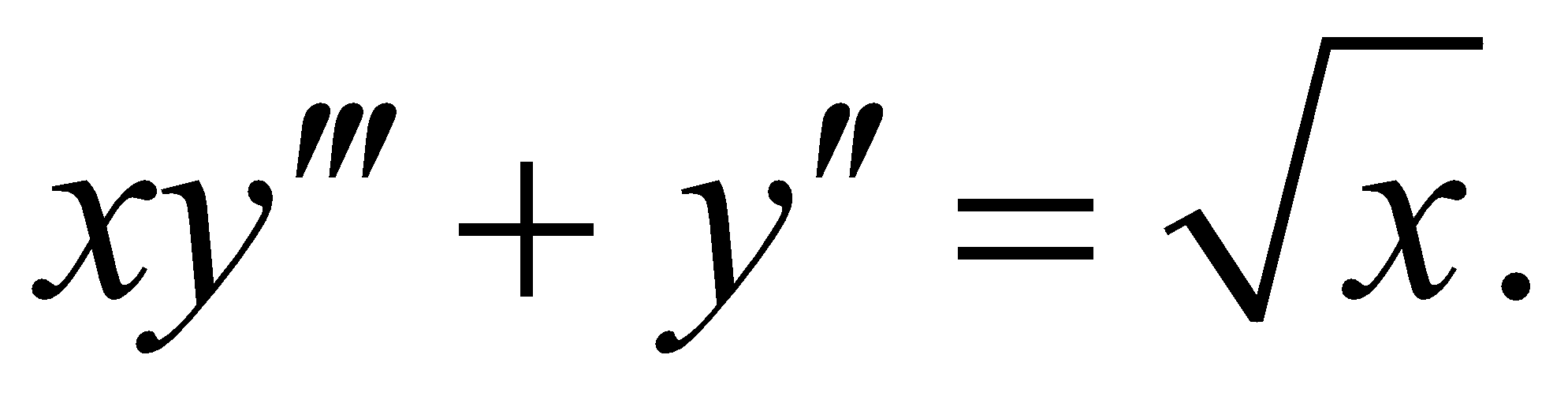
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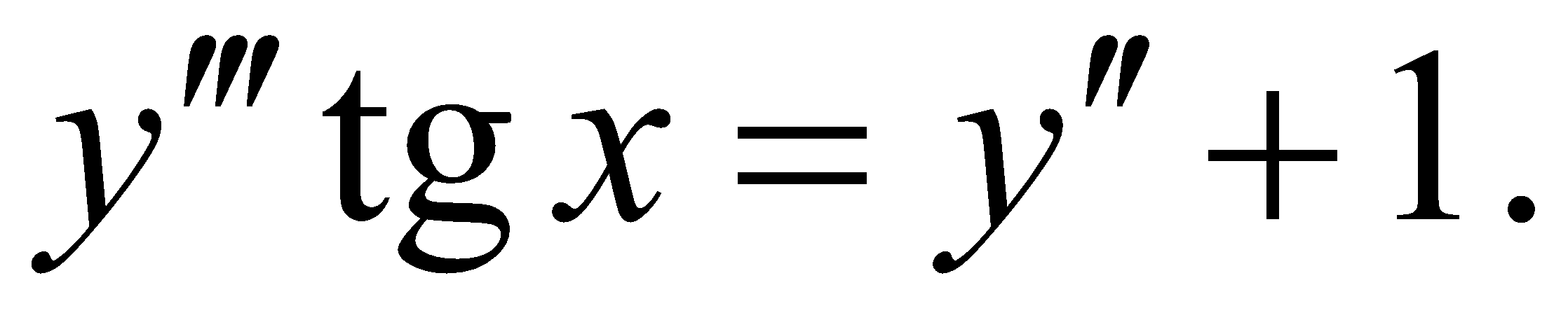
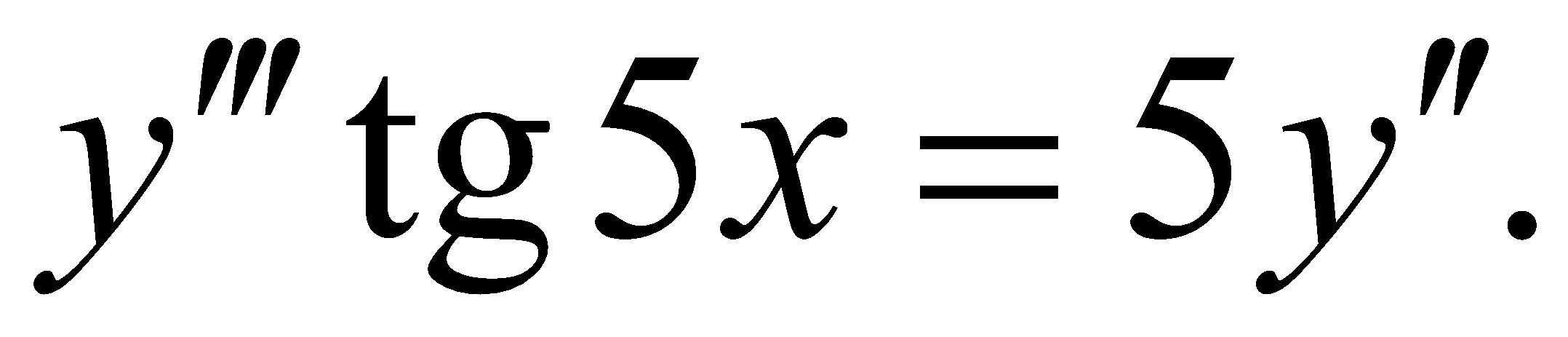
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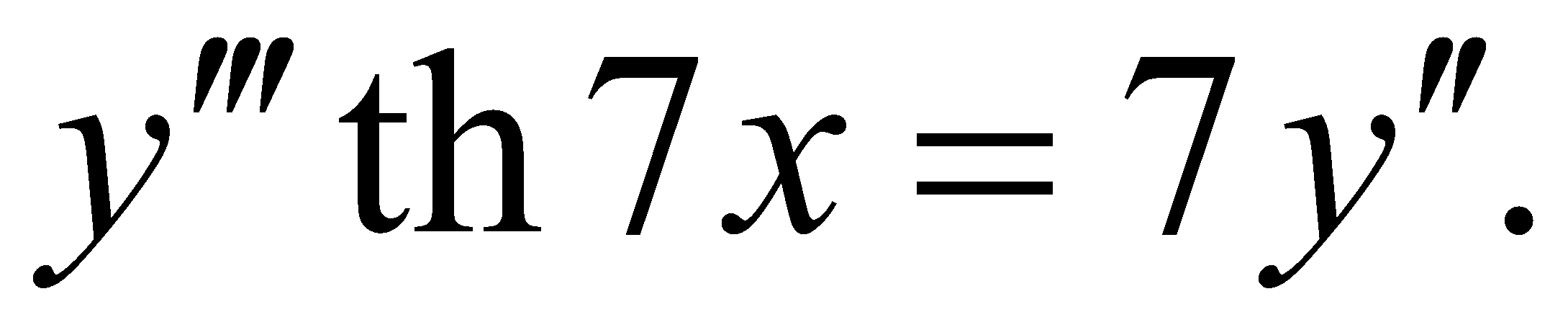
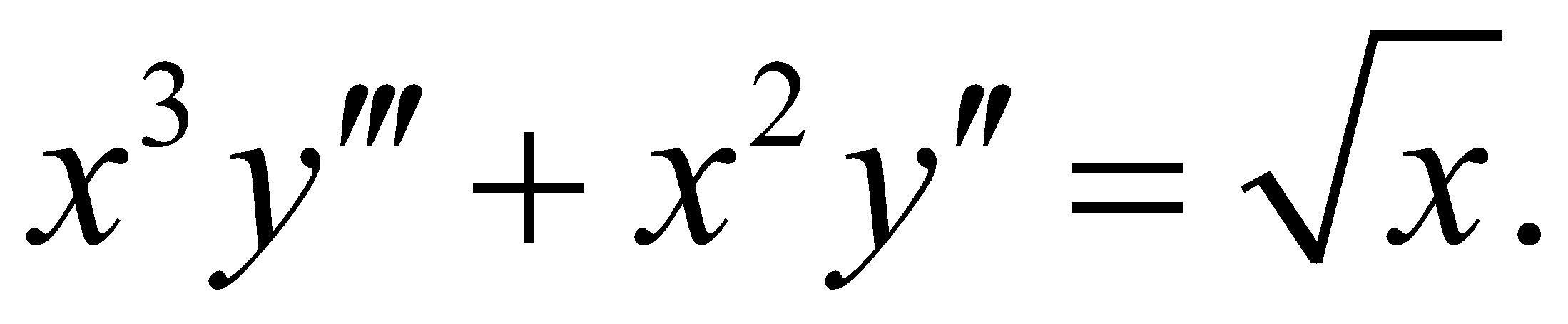
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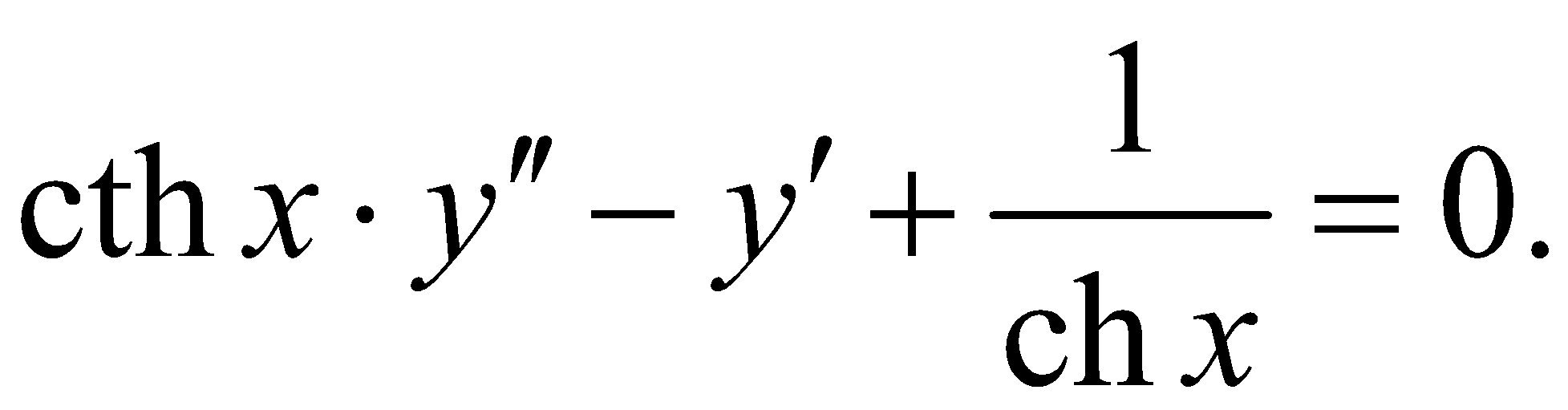
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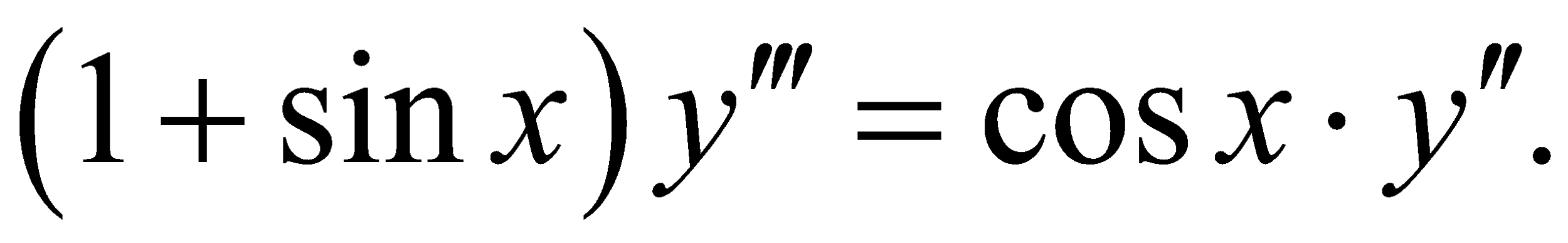
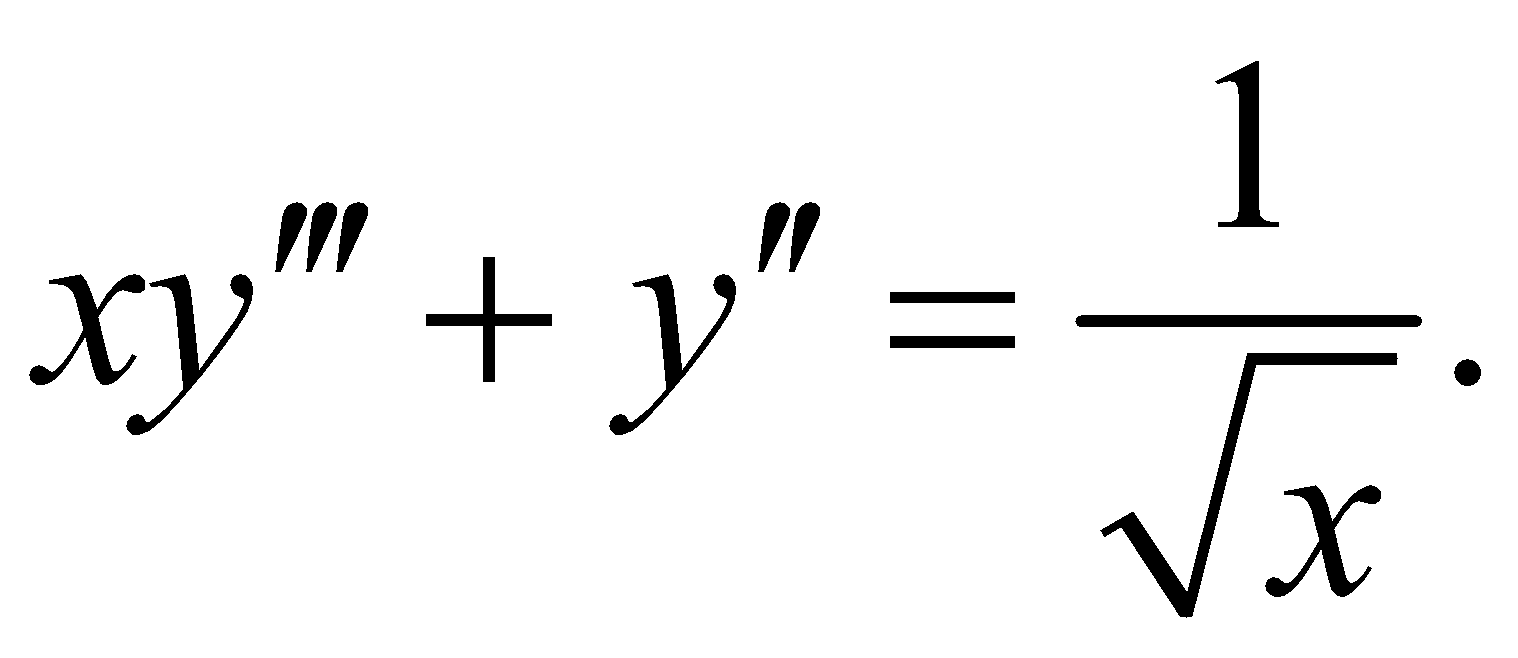
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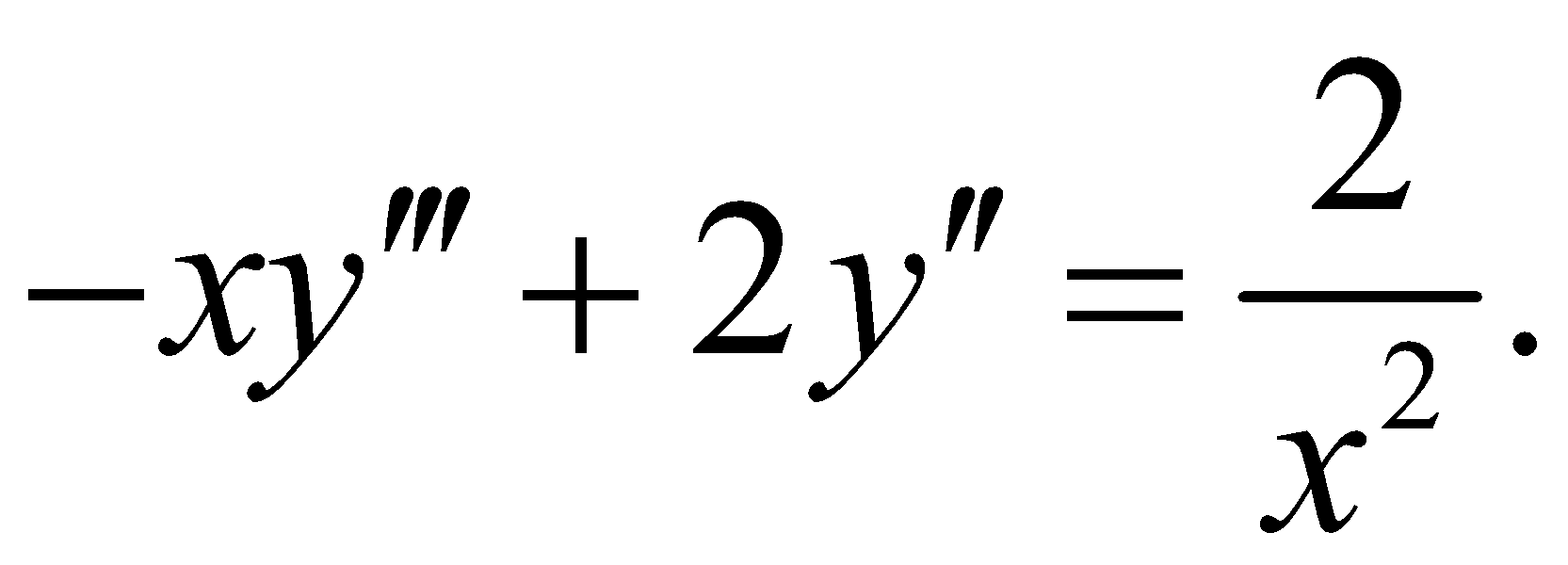
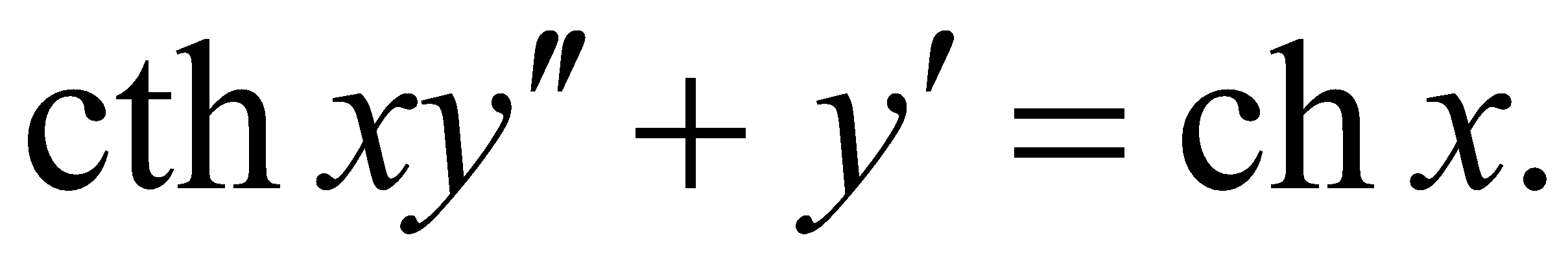
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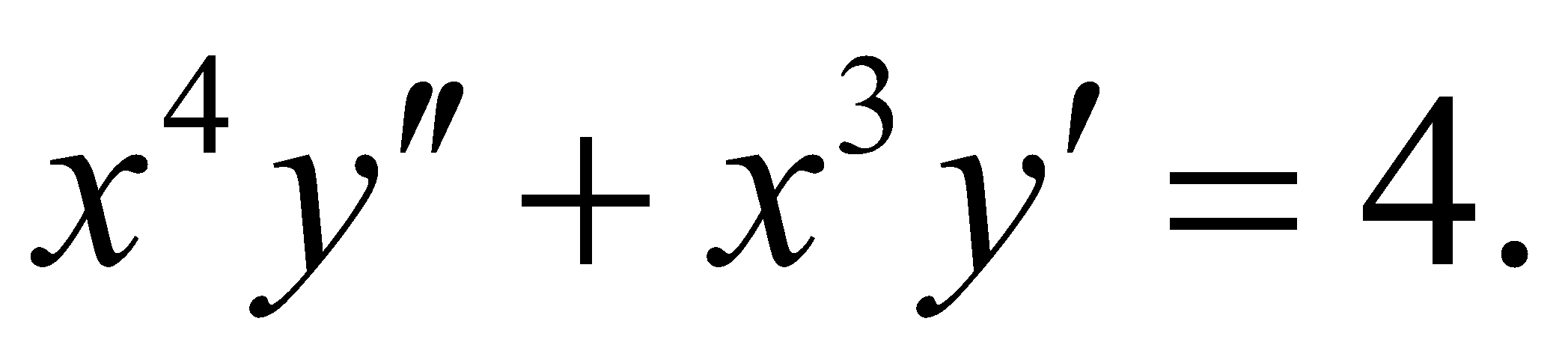
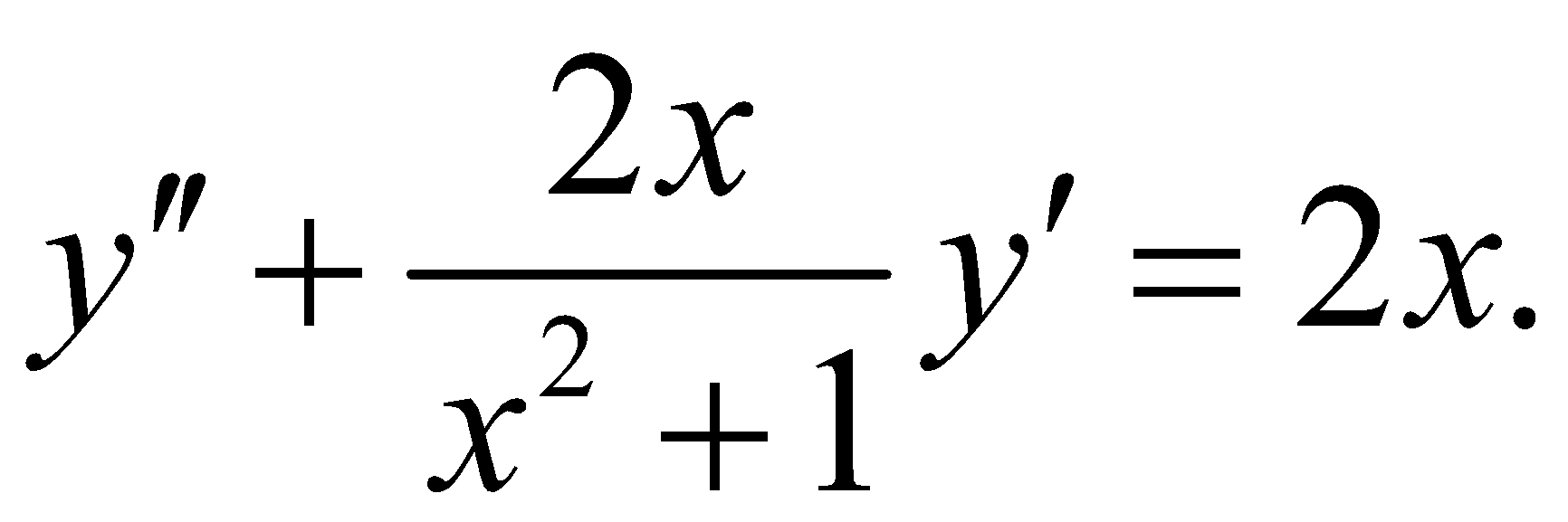
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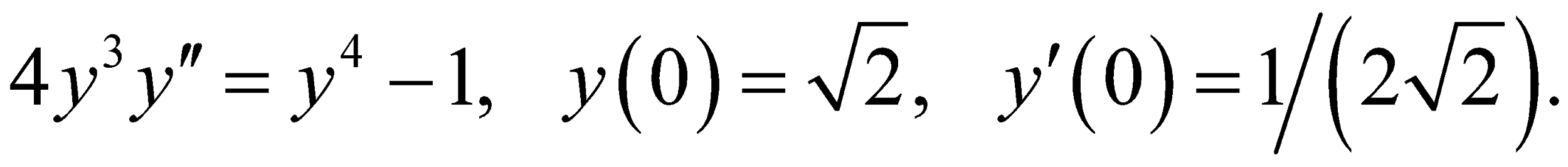
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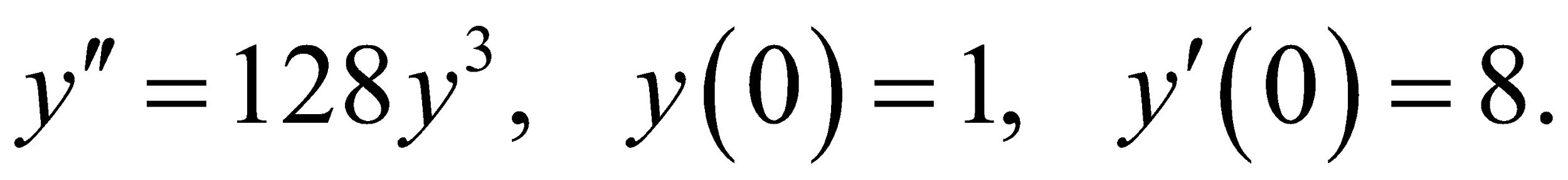
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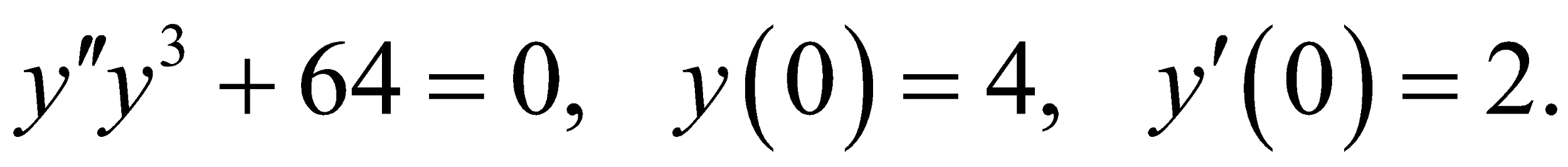
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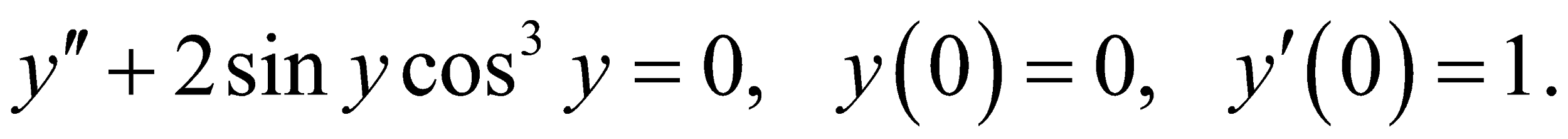
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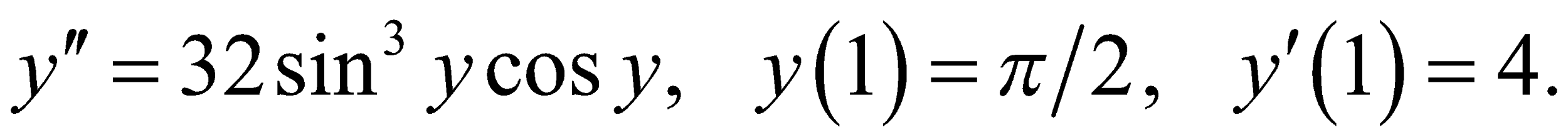
**Задача 2.** Знайти розв’язок задачі Коши.

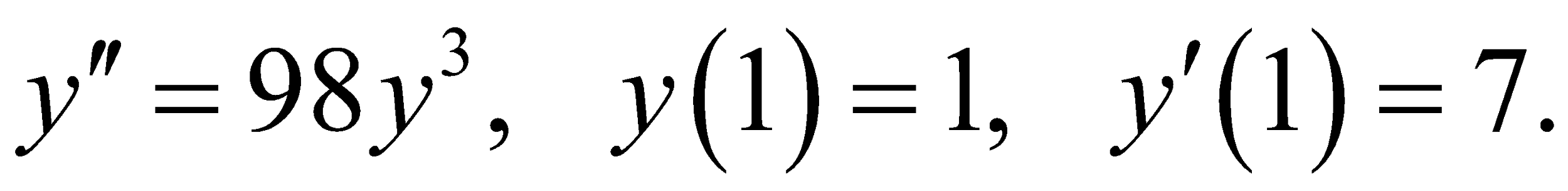
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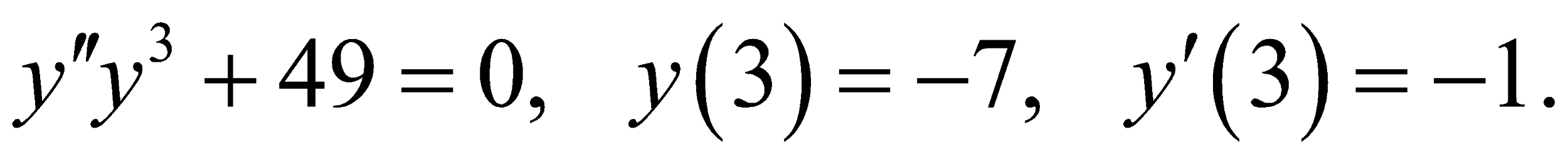
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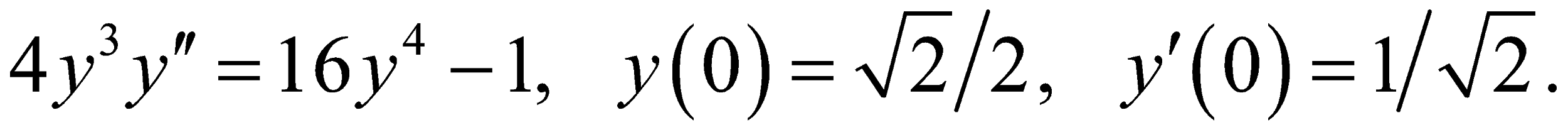
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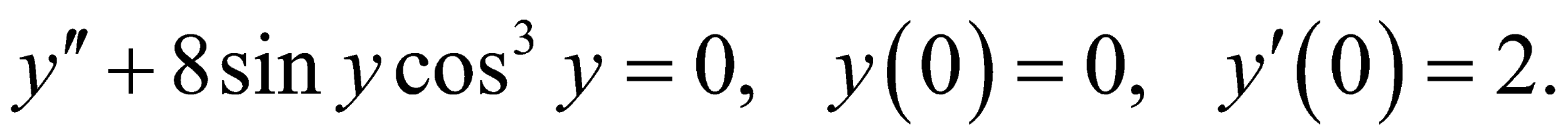
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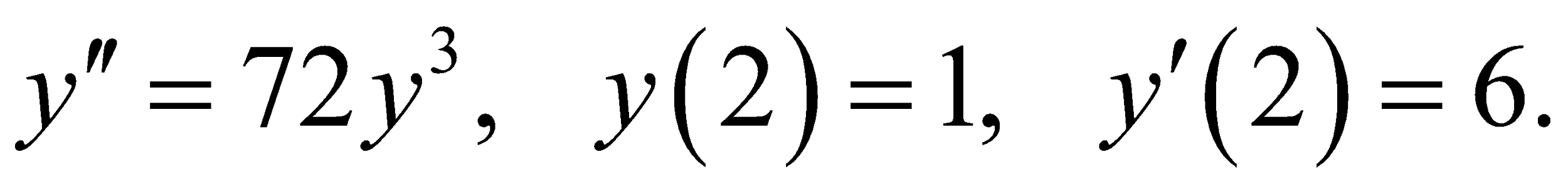
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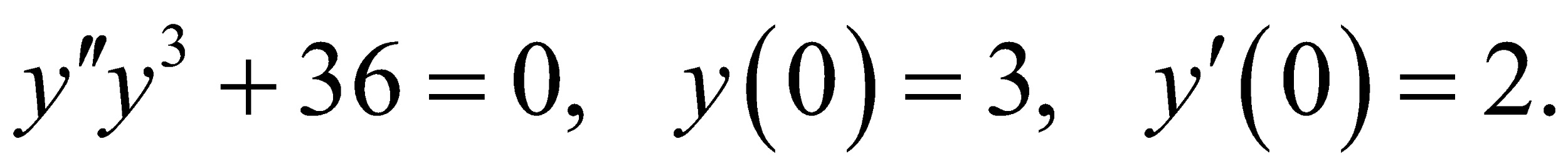
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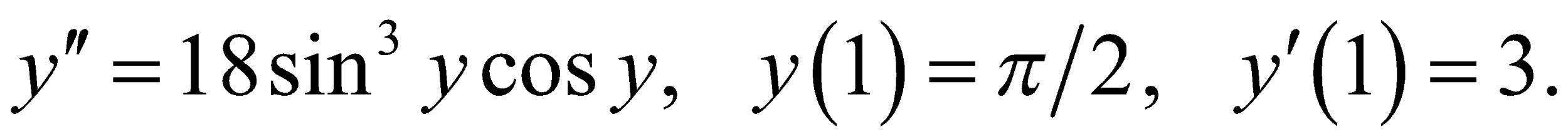
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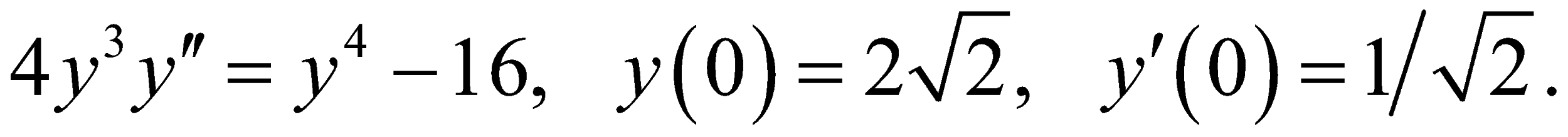
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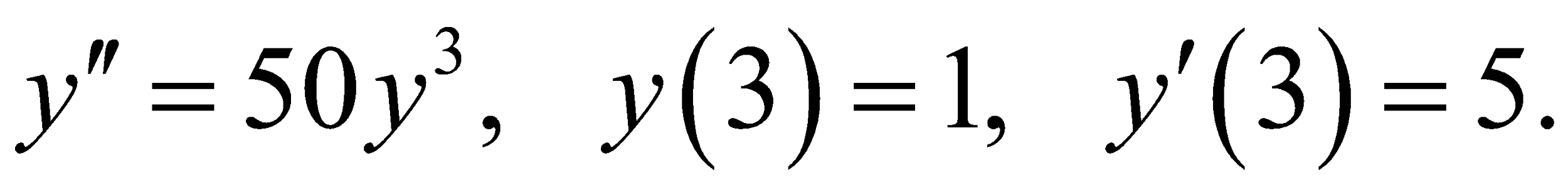
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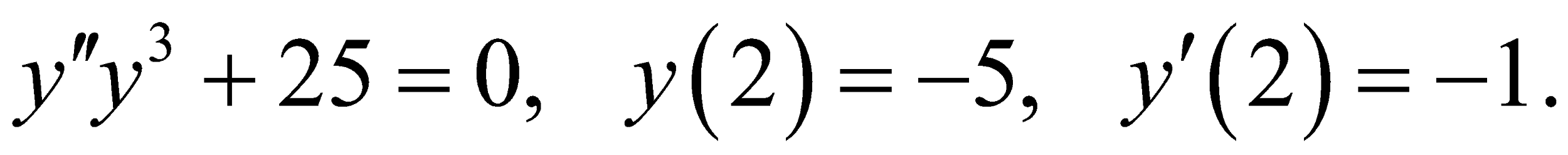
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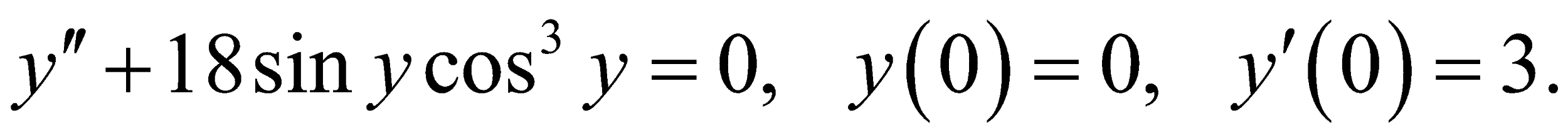
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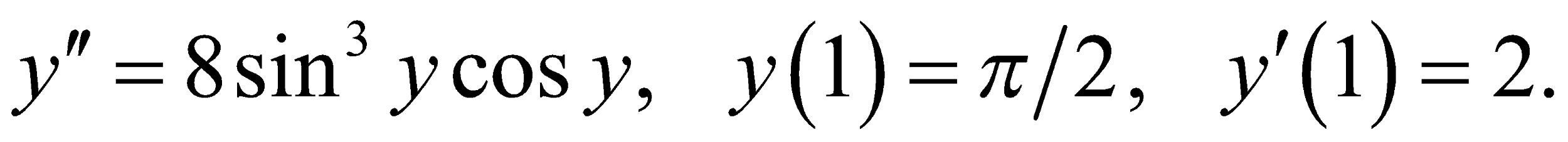
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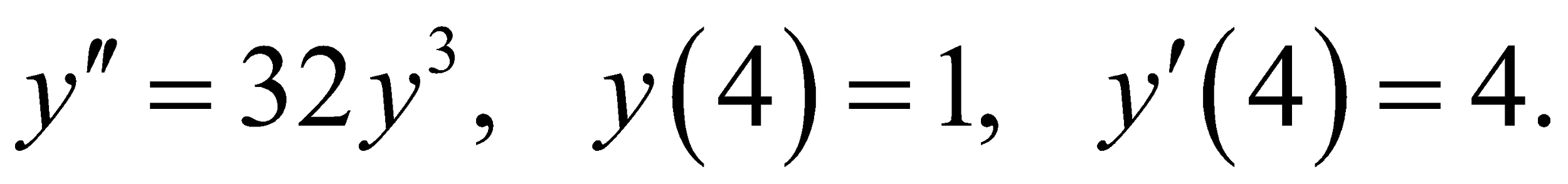
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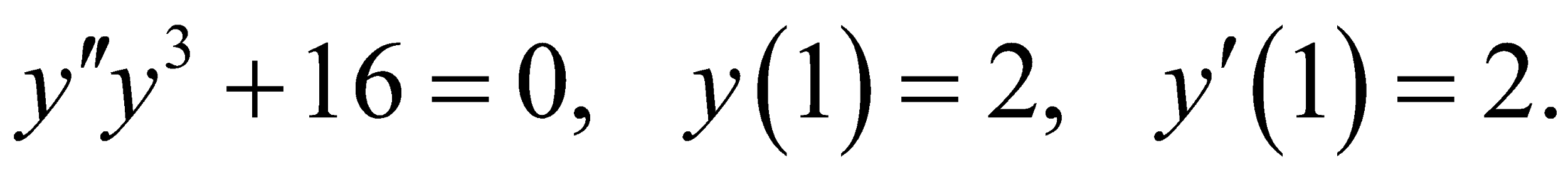
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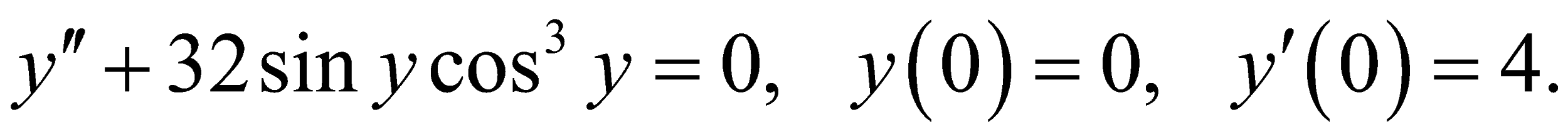
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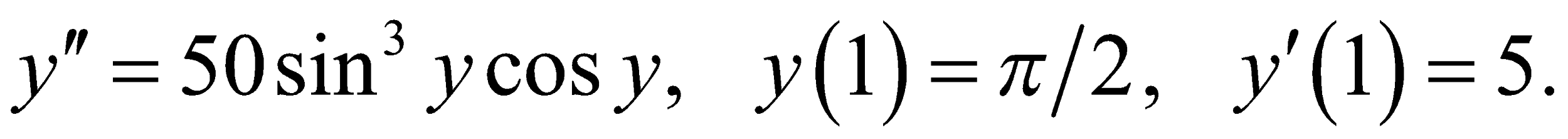
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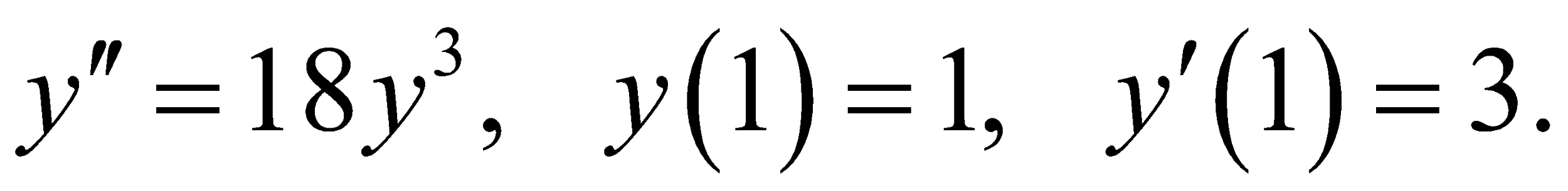
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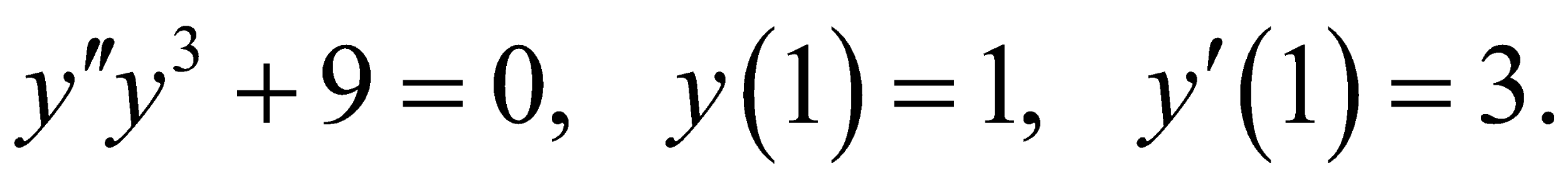
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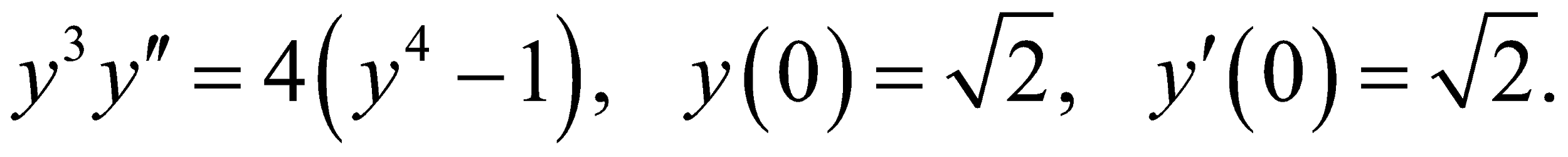
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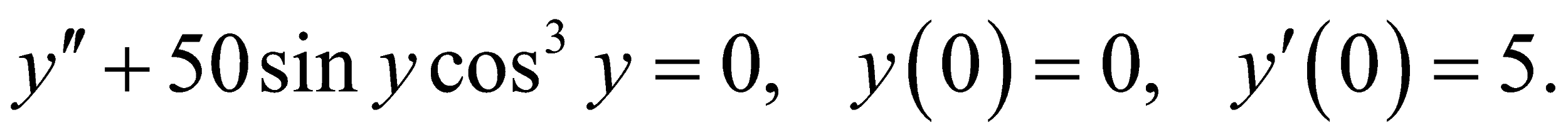
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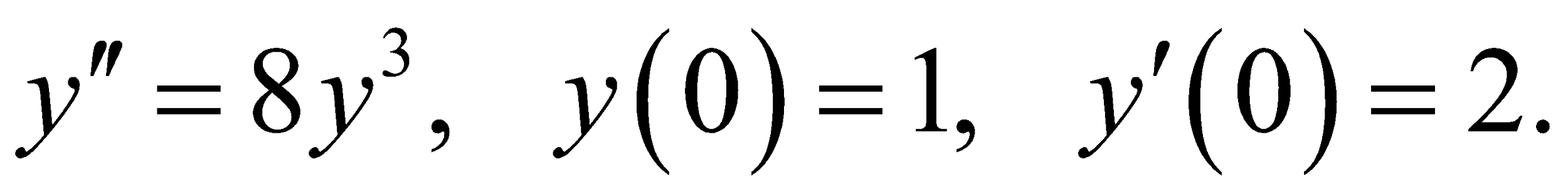
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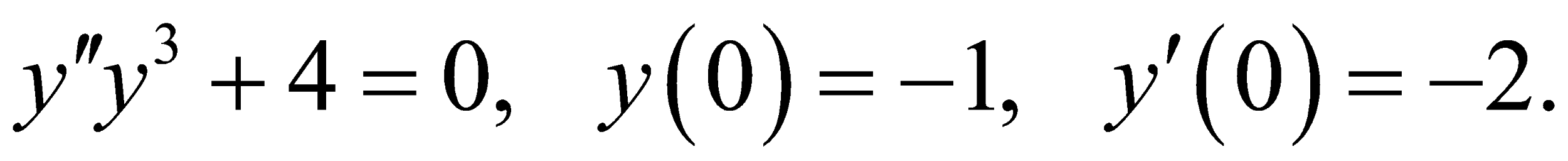
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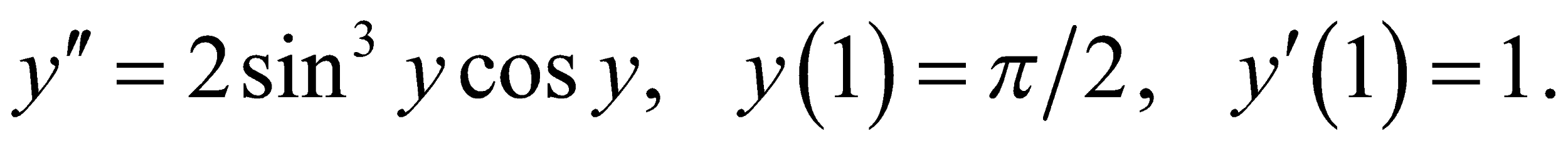
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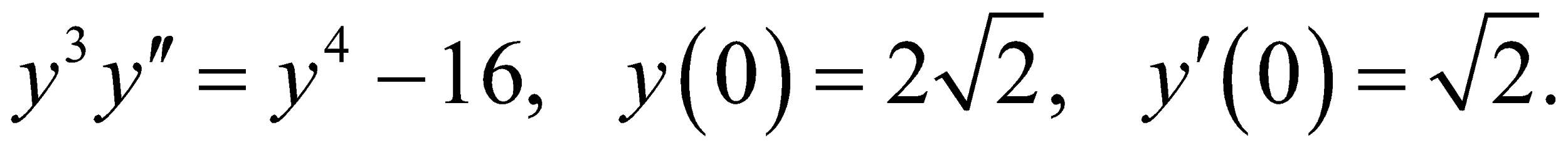
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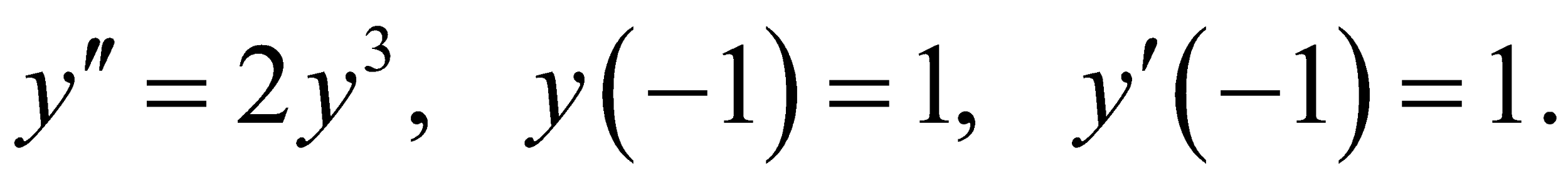
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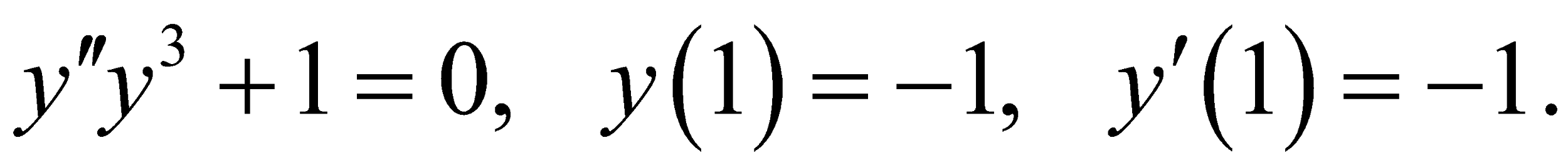
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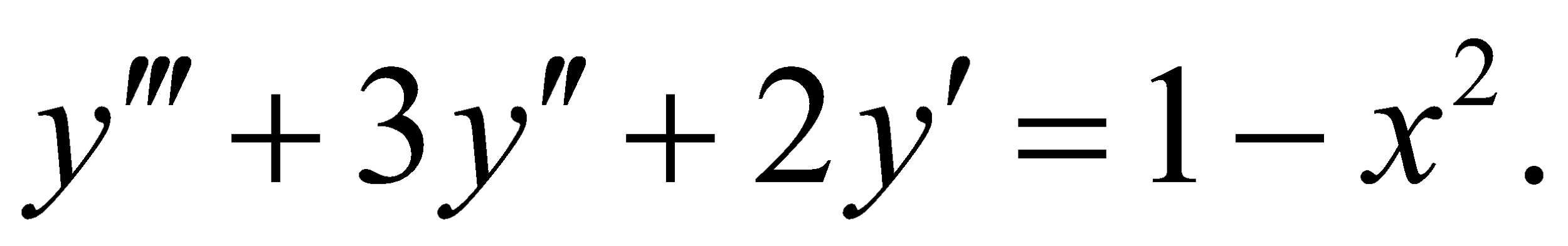
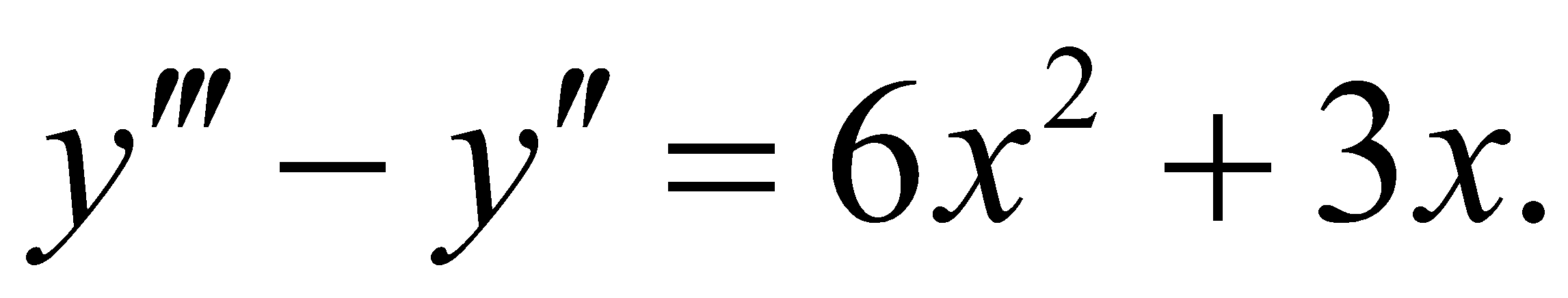
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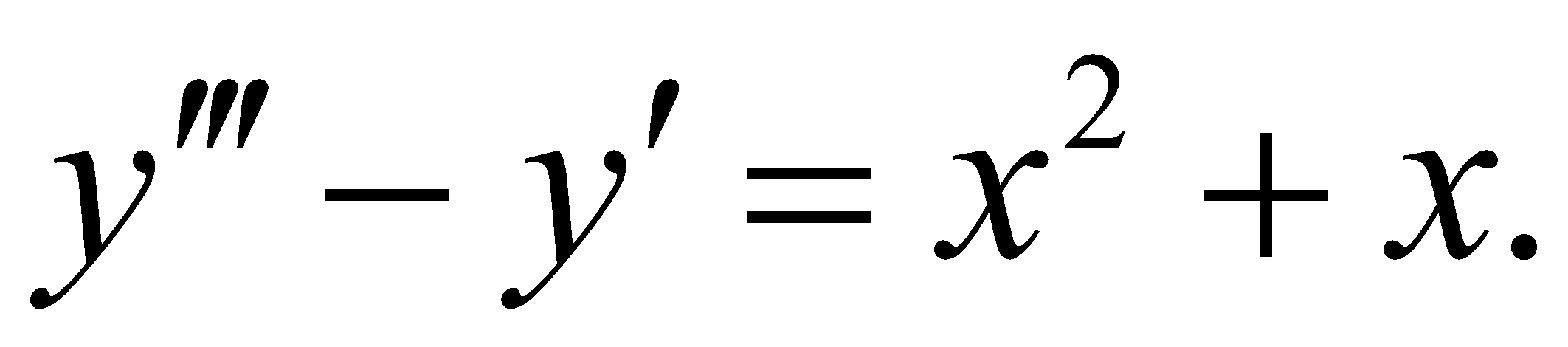
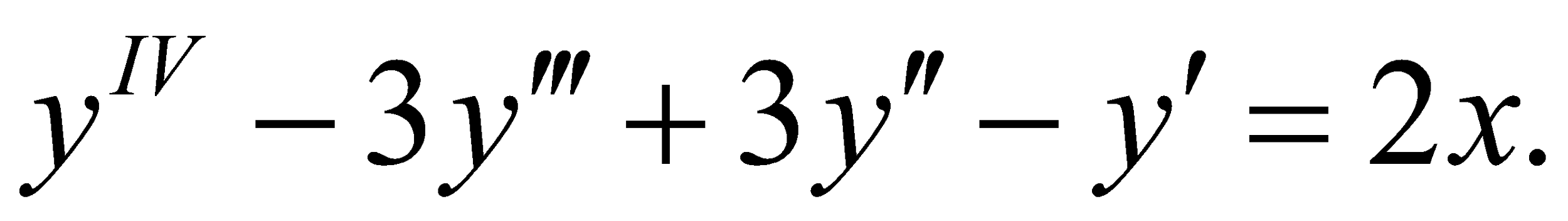
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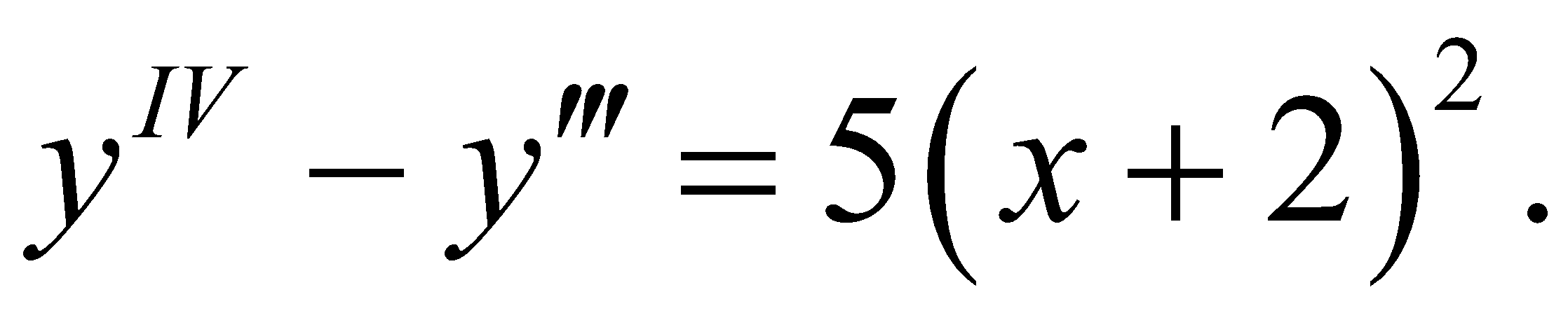
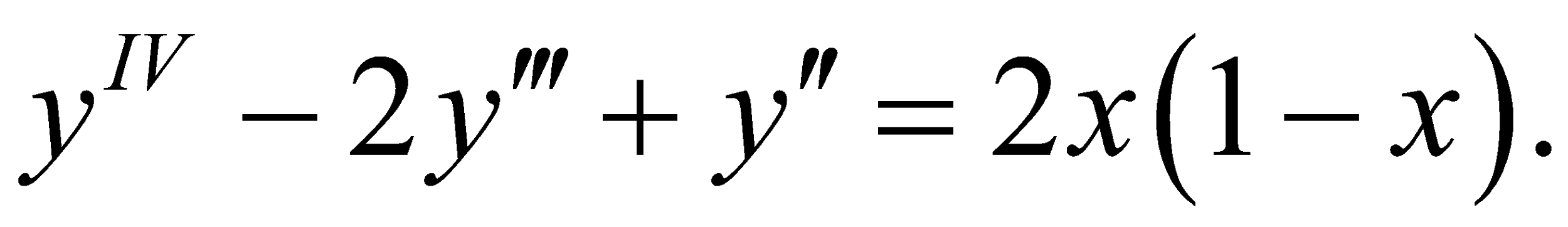
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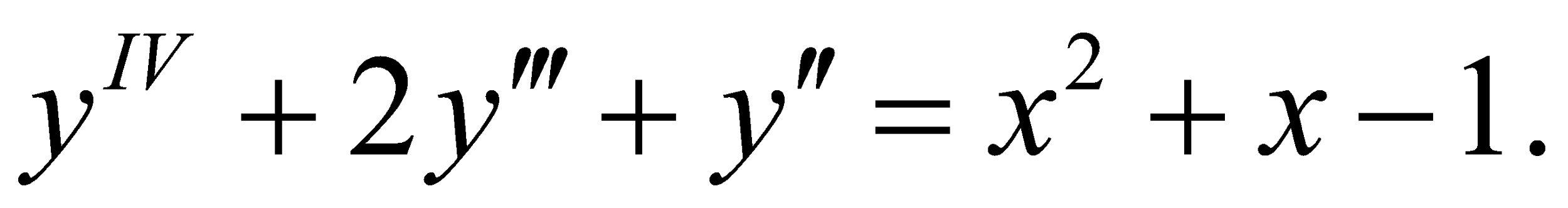
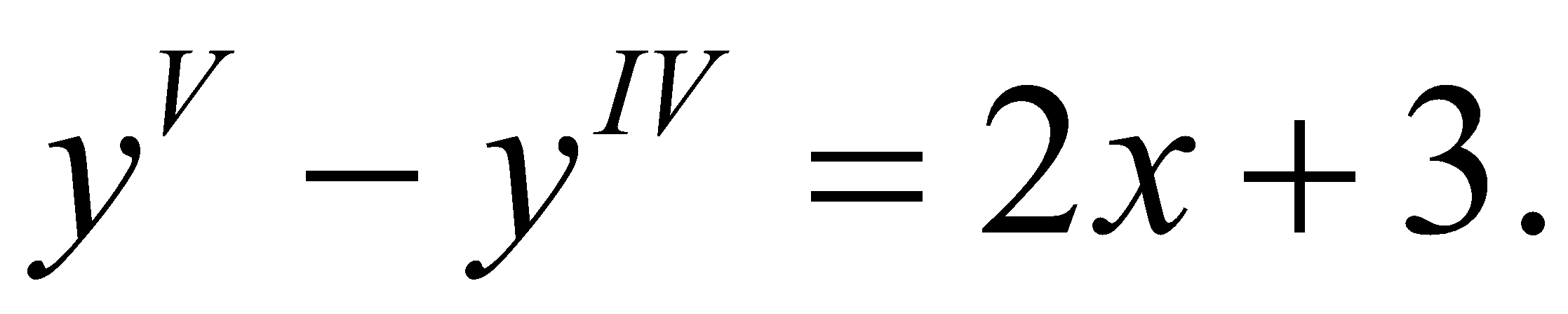
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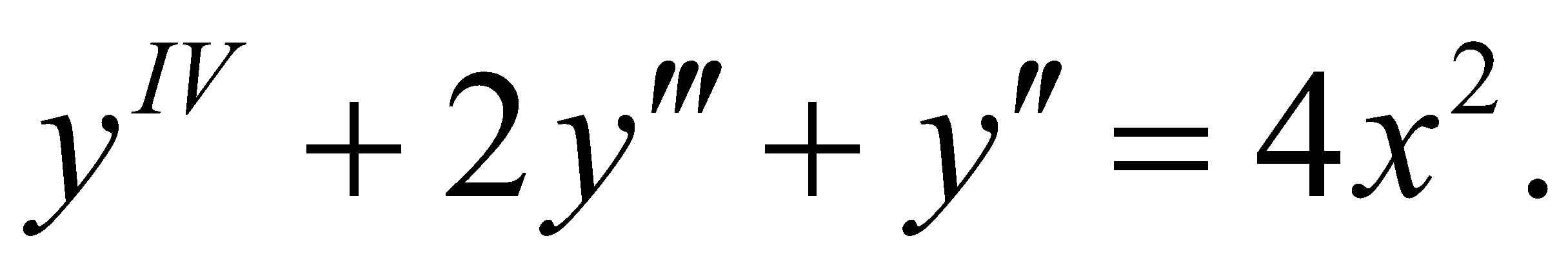
**Задача 3**. Знайти загальний розв’язок диференціального рівняння.

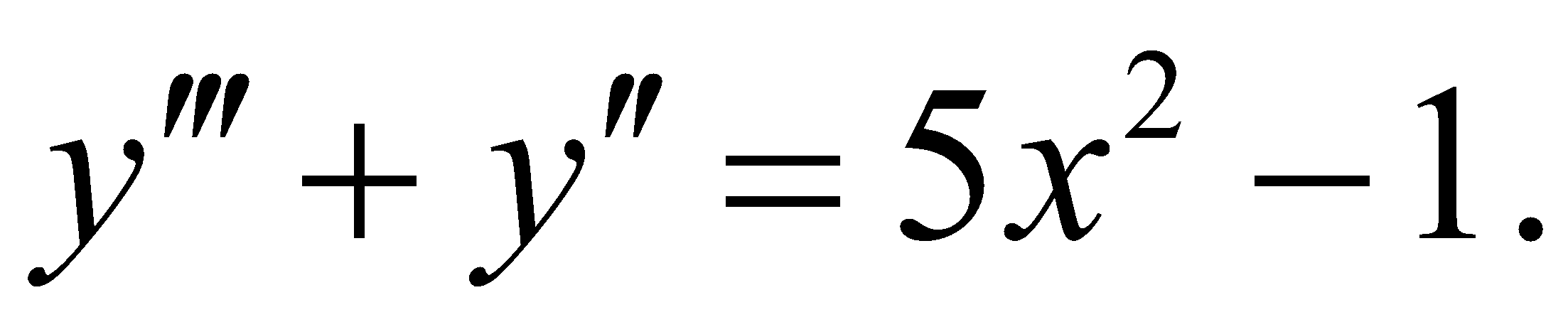
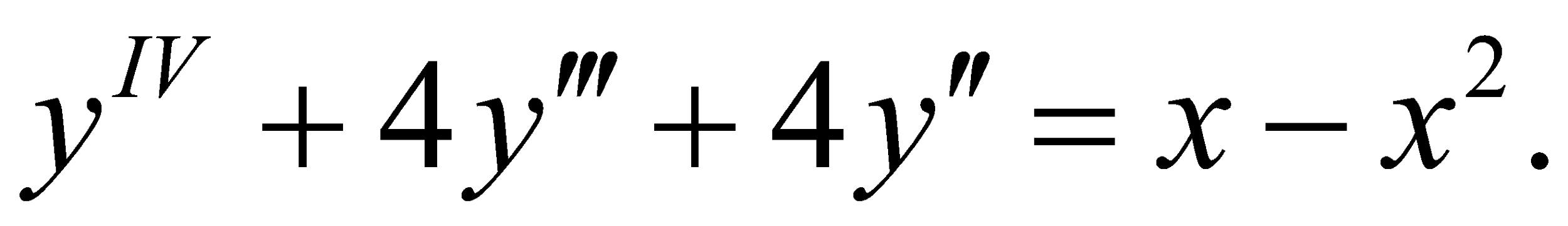
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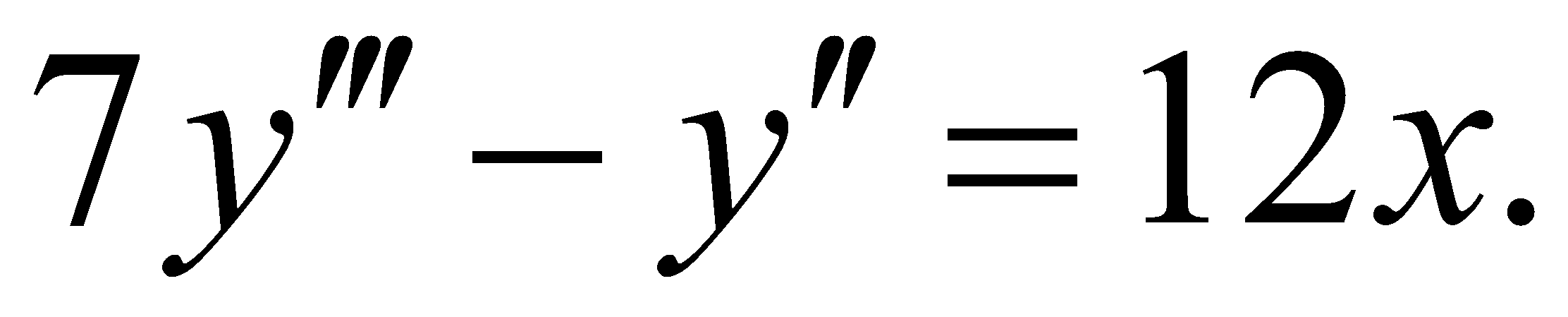
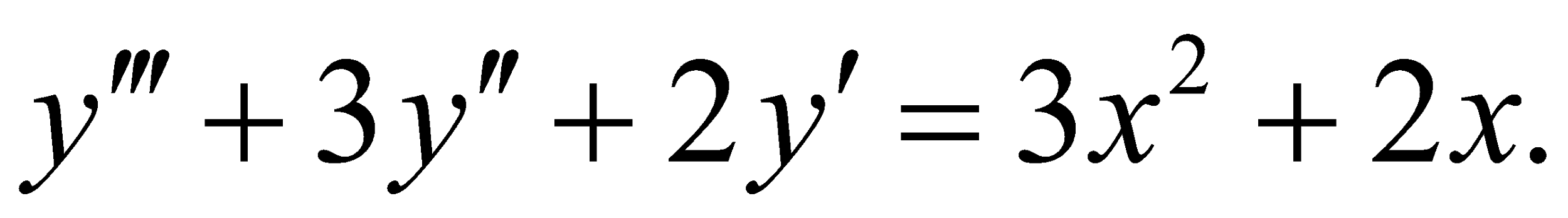
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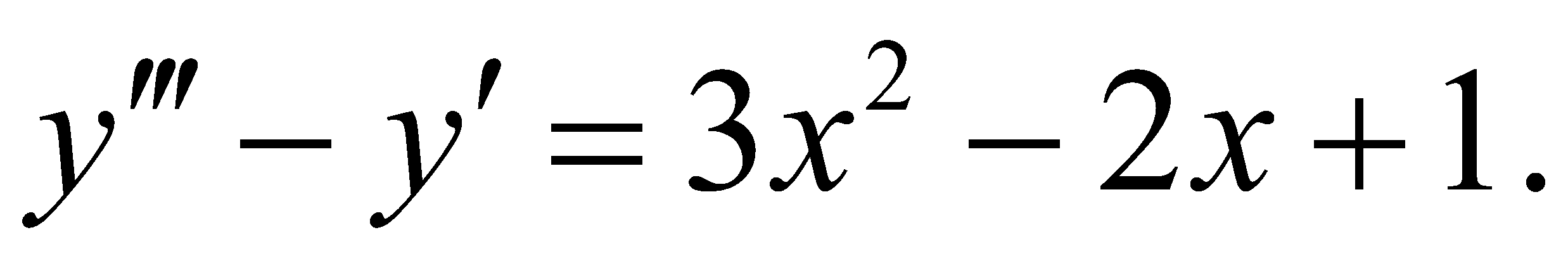
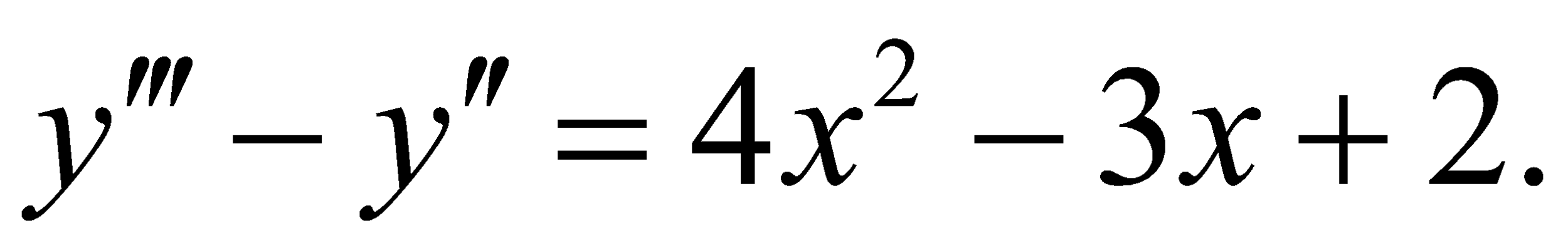
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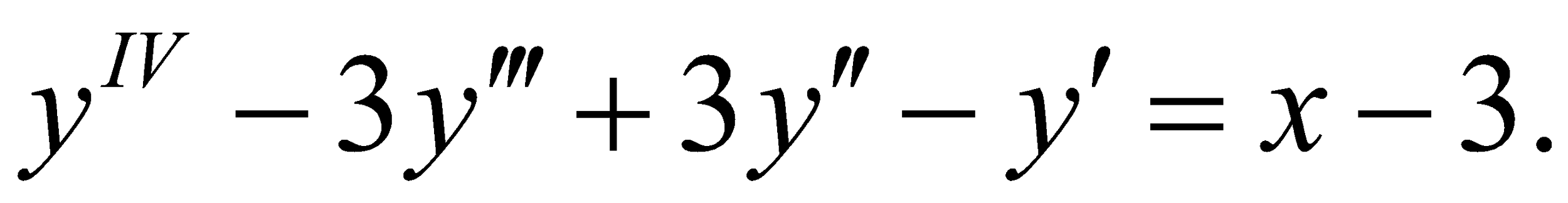
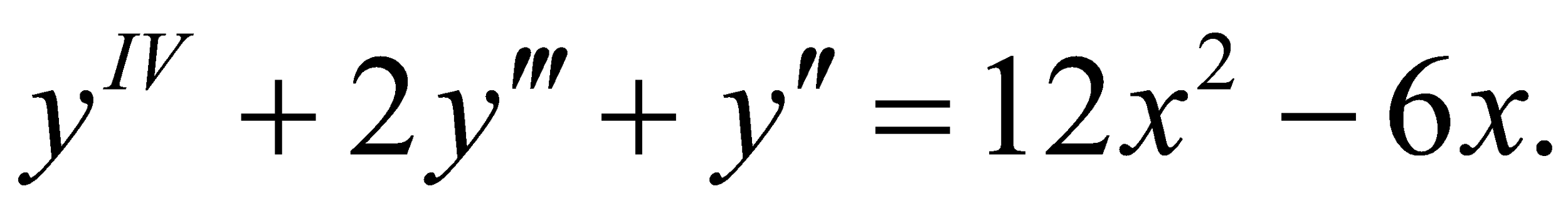
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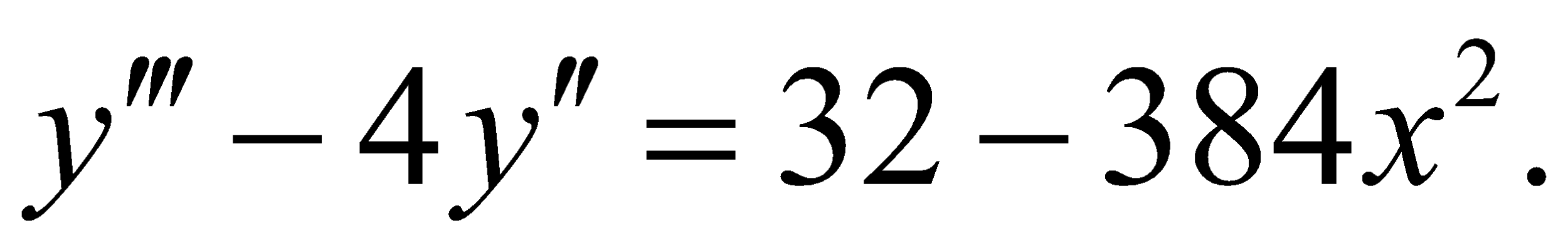
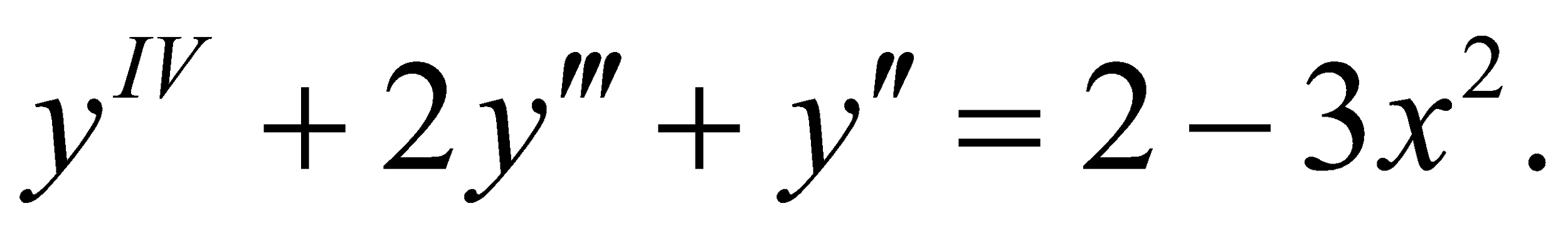
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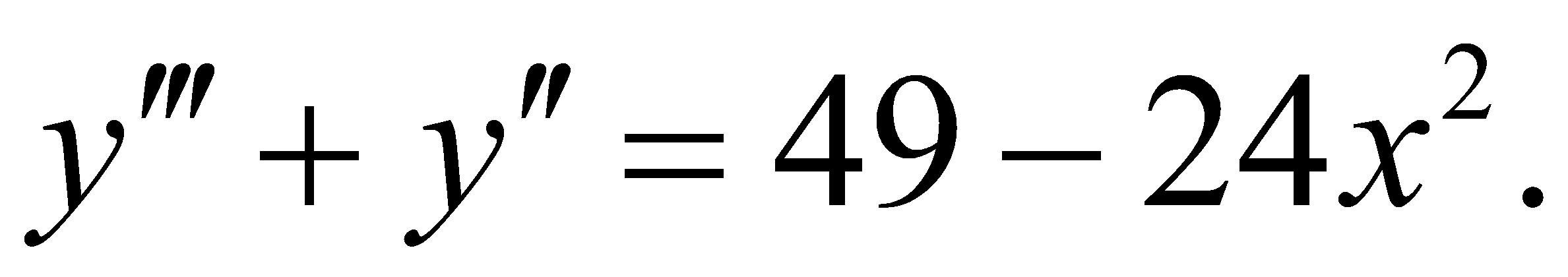
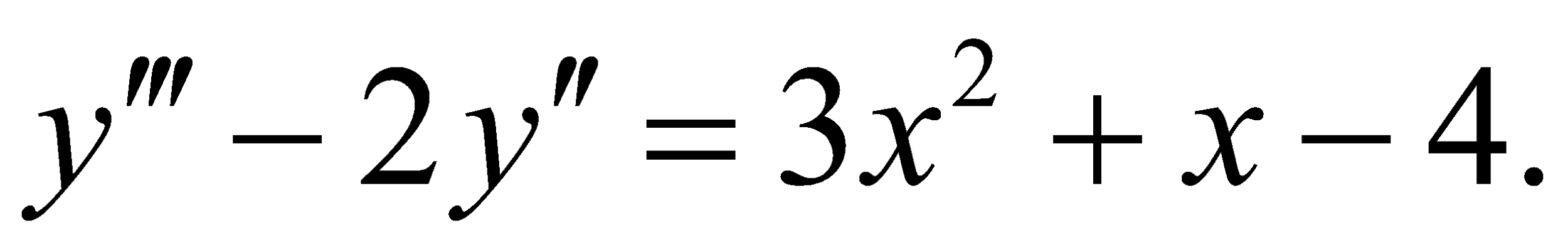
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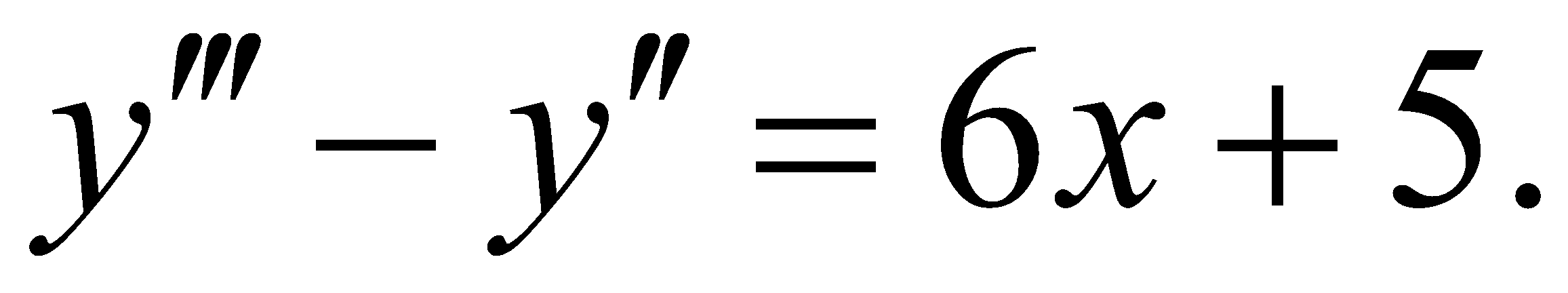
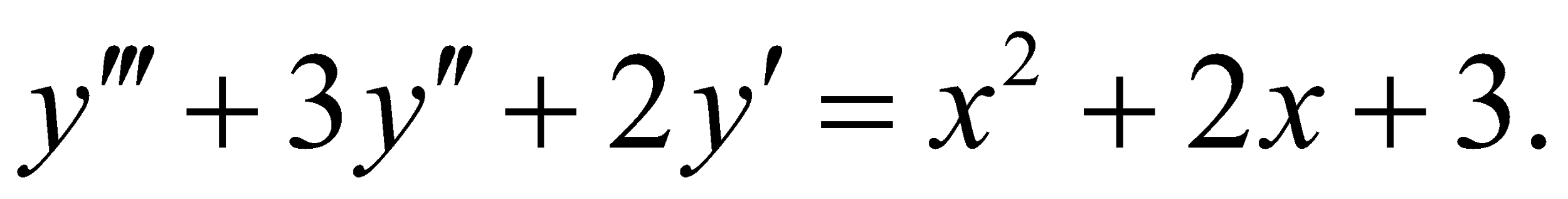
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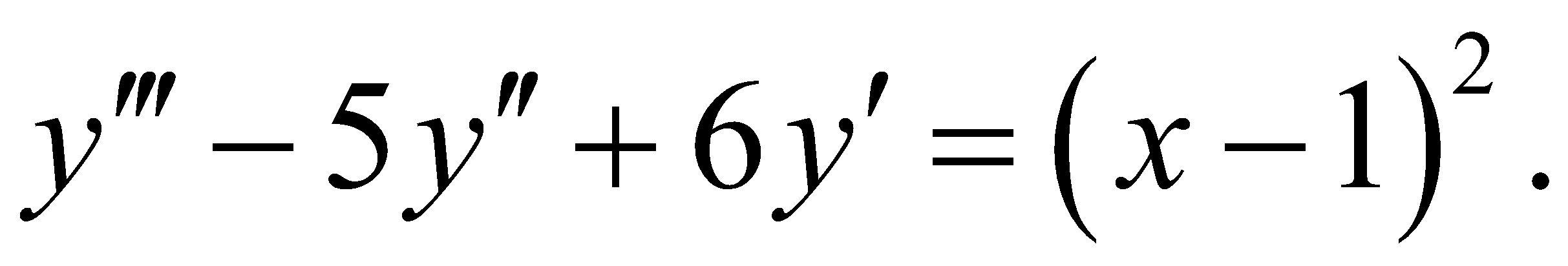
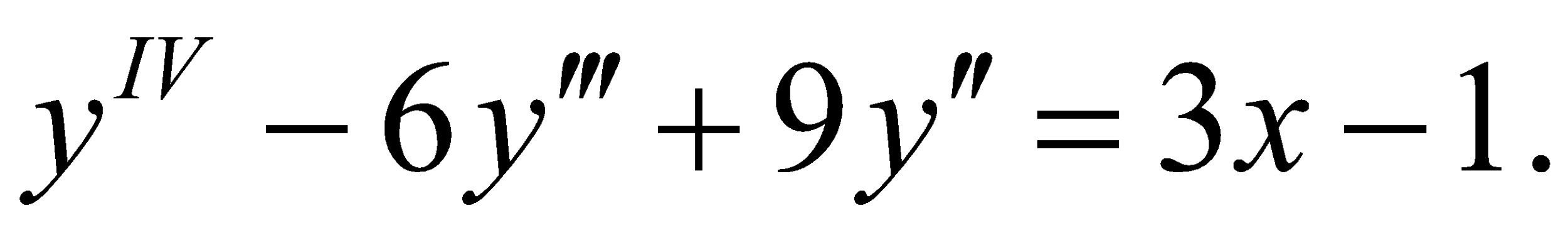
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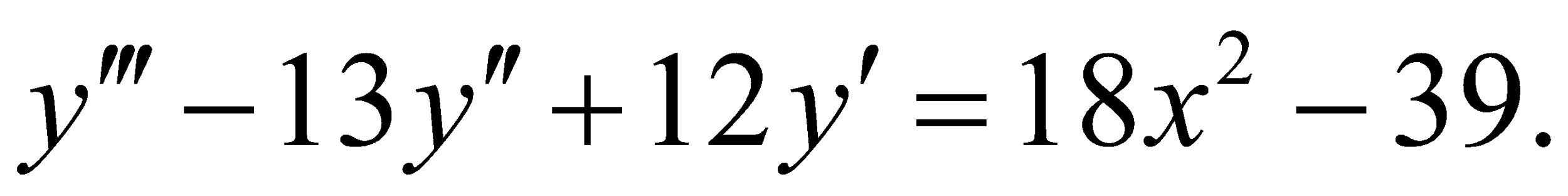
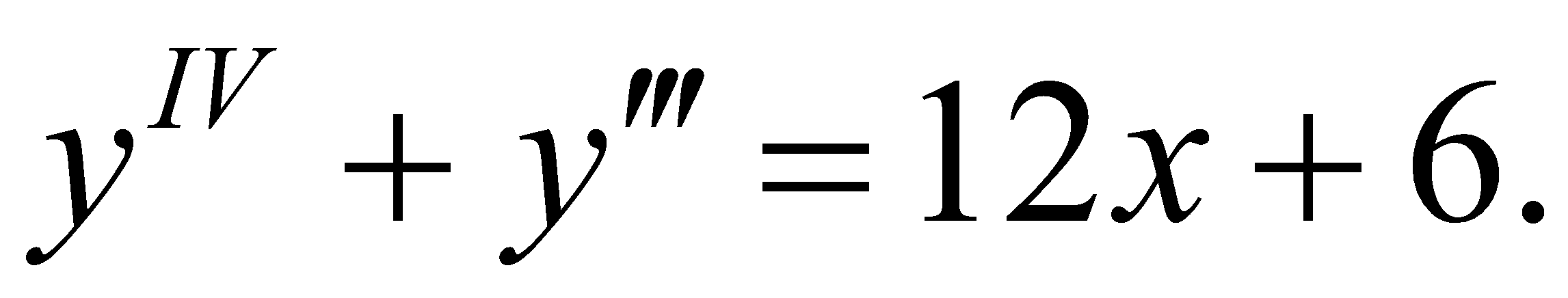
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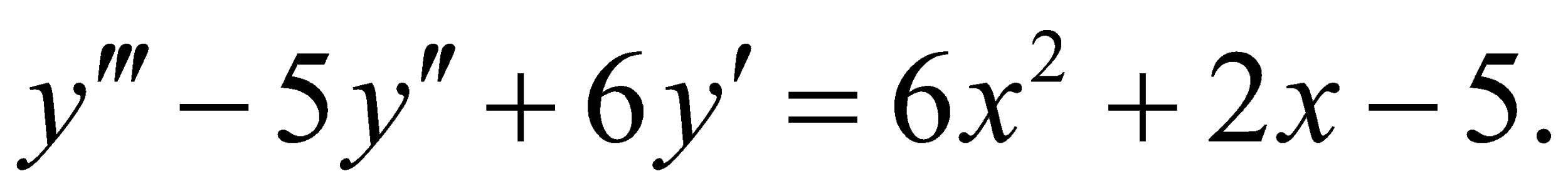
3.19.  3.20. 

3.21.  3.22. 

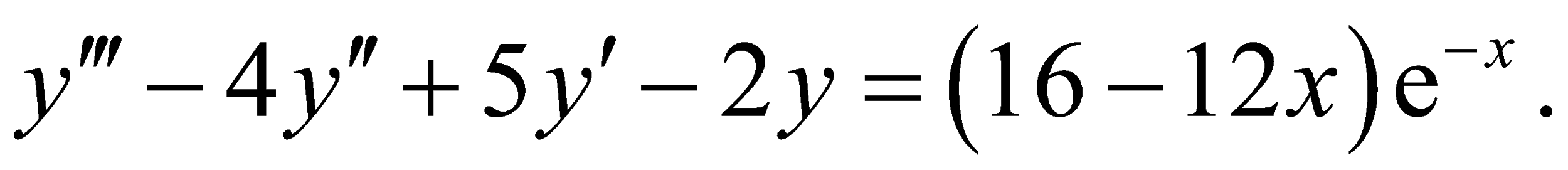
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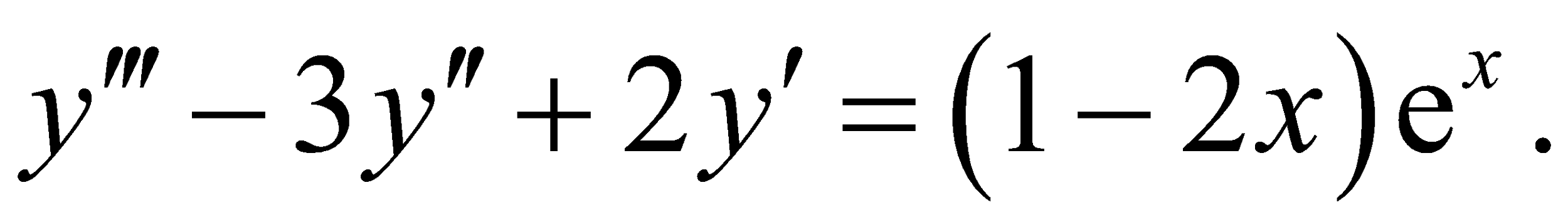
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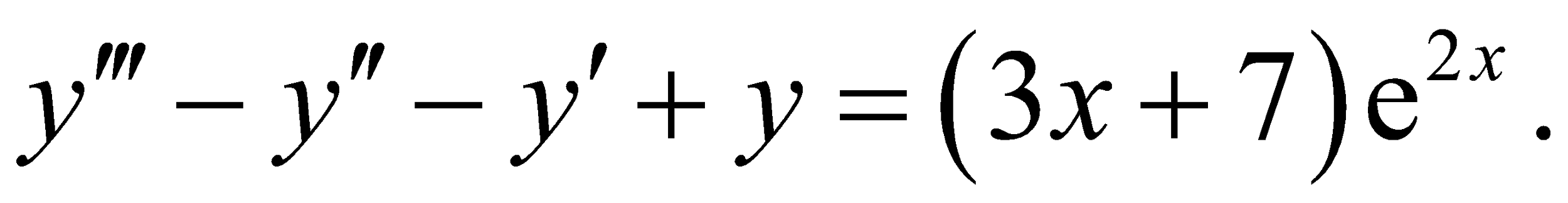
12.29.  12.30. 

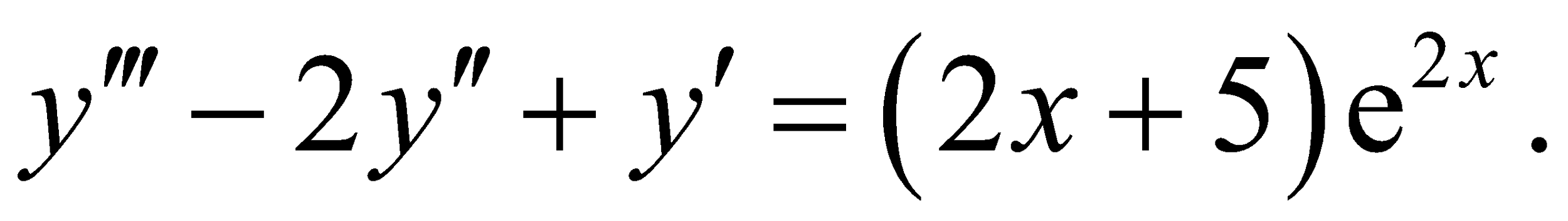
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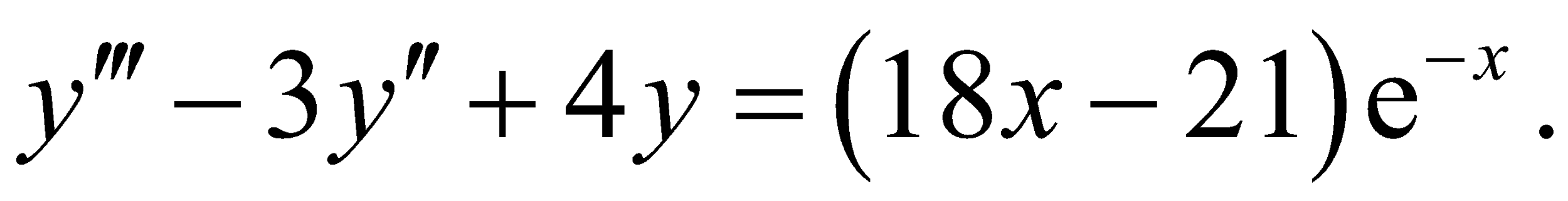
**Задача 4.** Знайти загальний розв’язок диференціального рівняння.

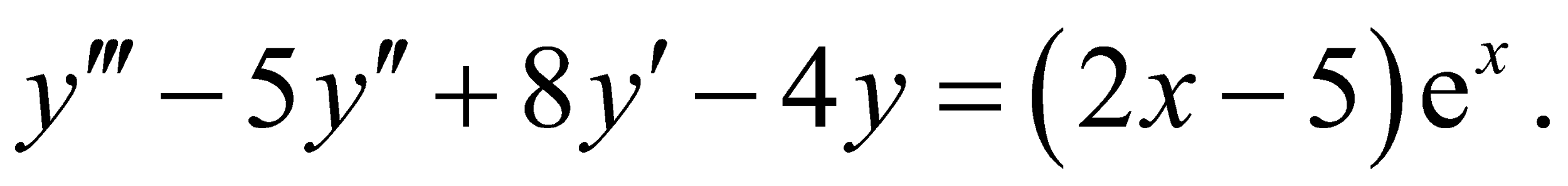
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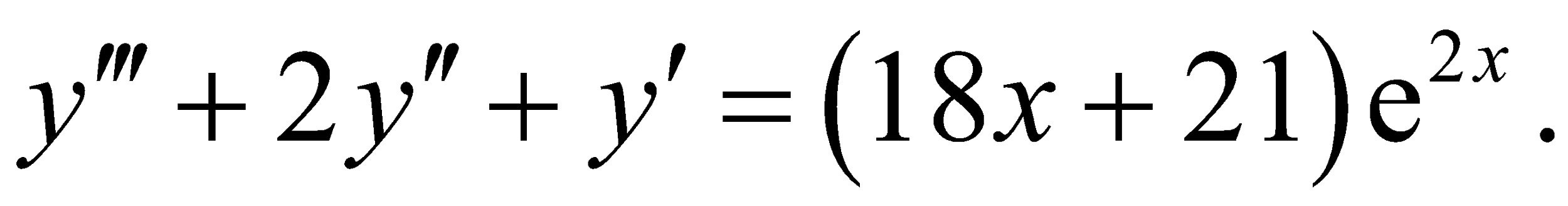
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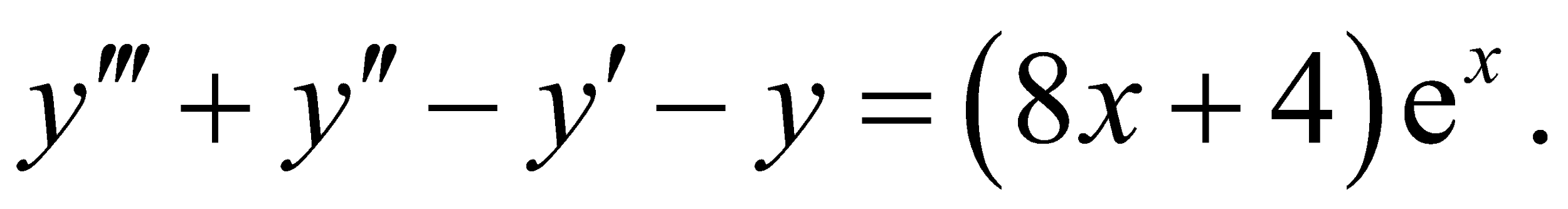
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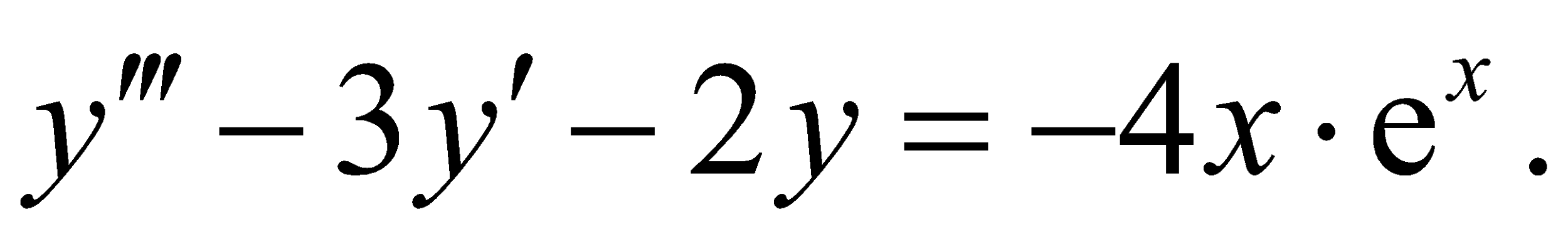
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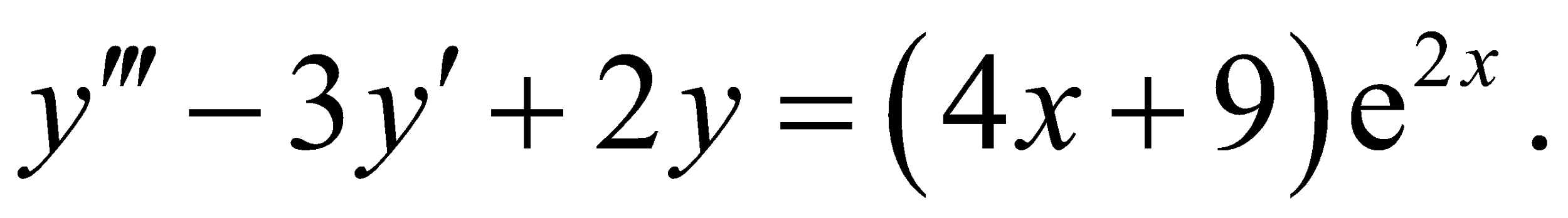
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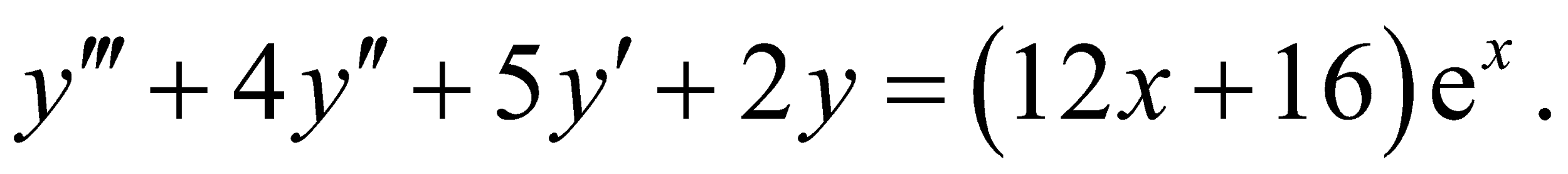
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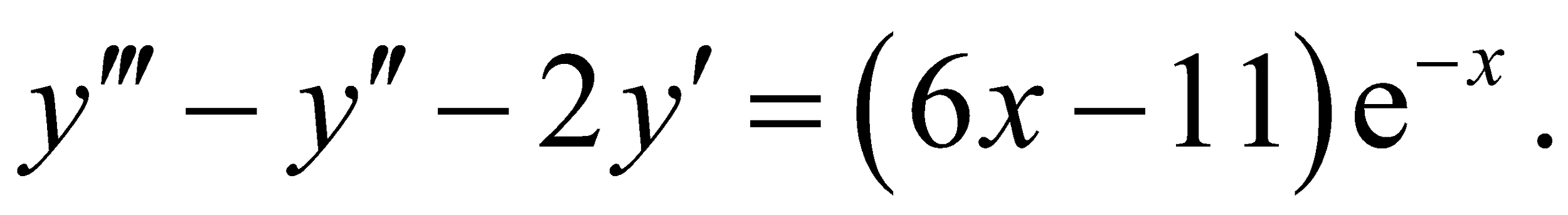
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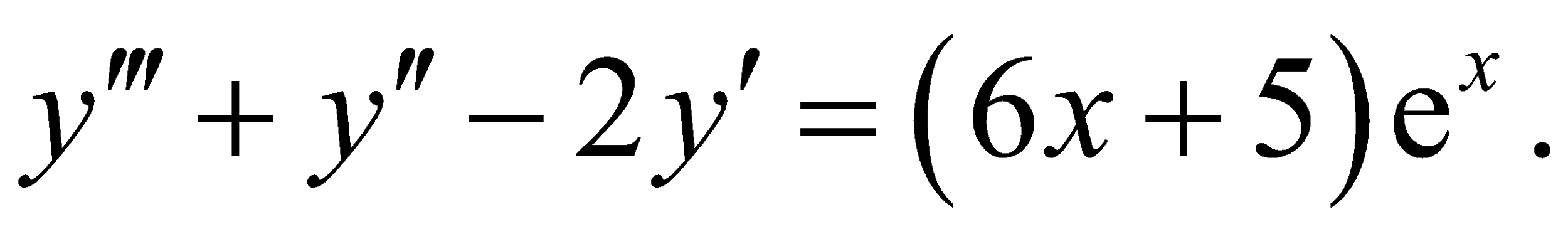
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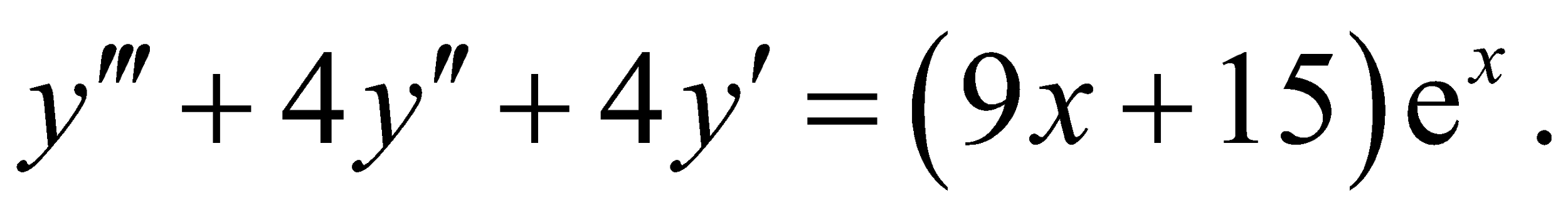
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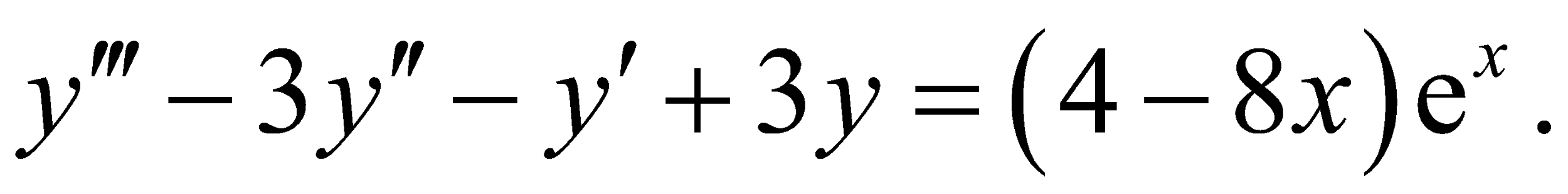
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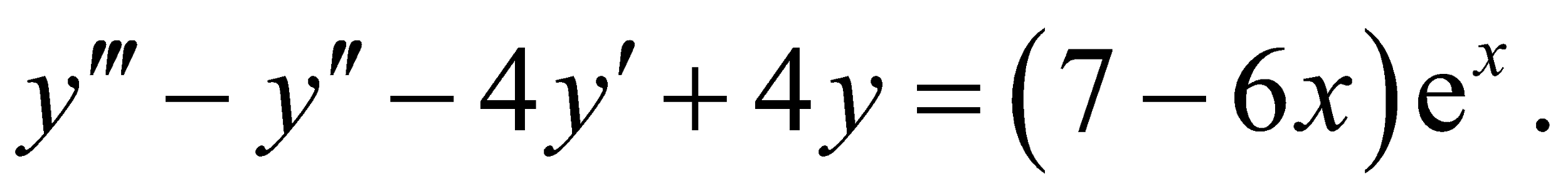
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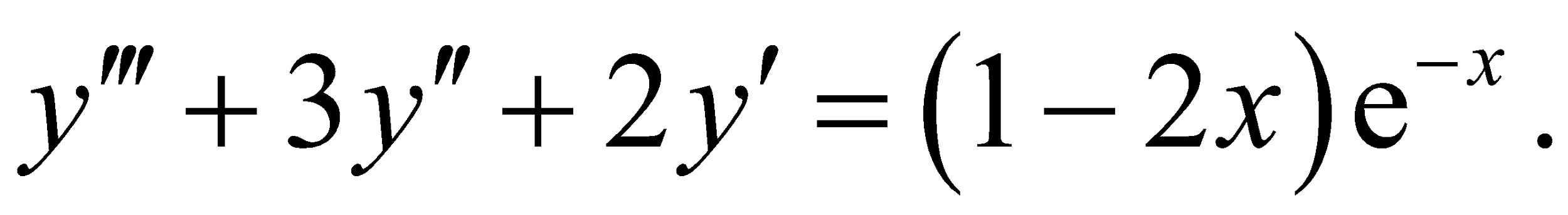
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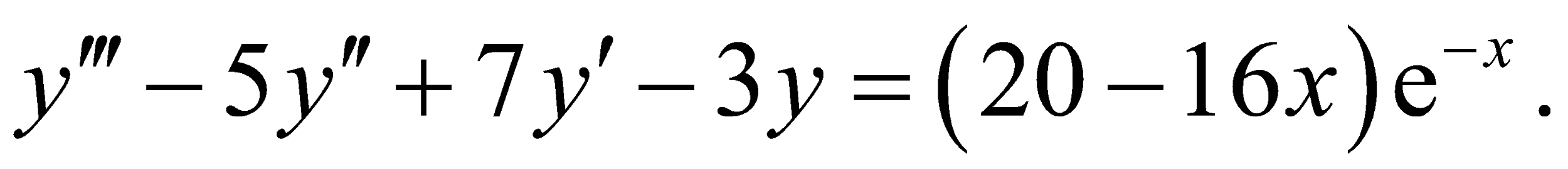
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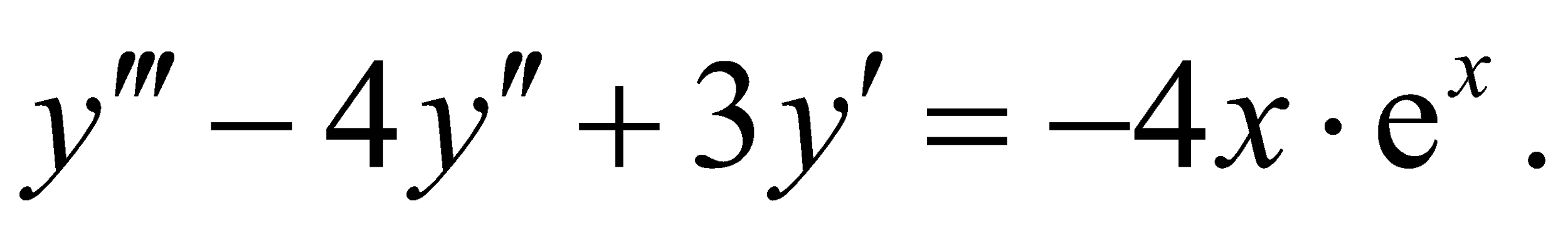
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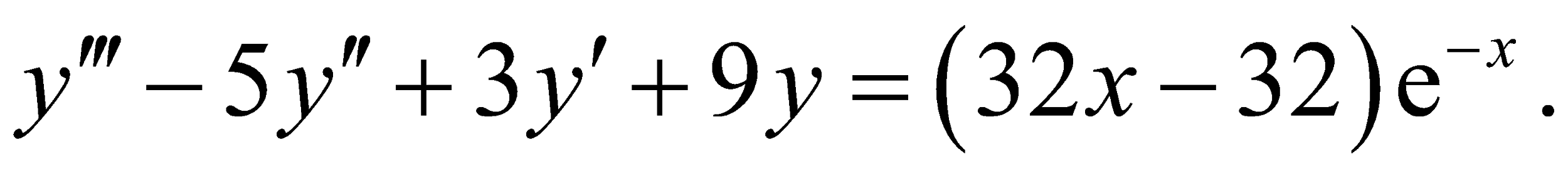
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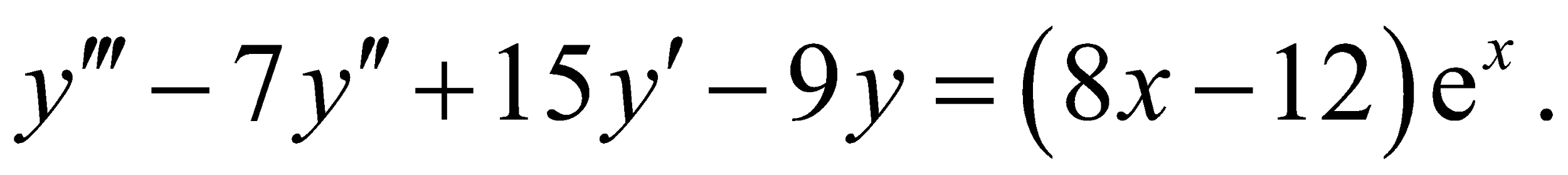
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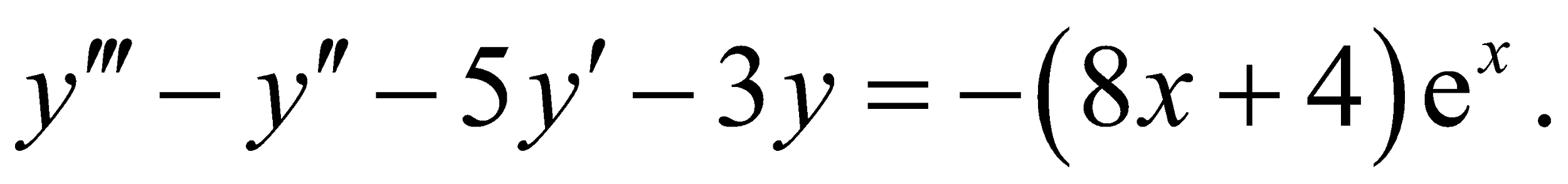
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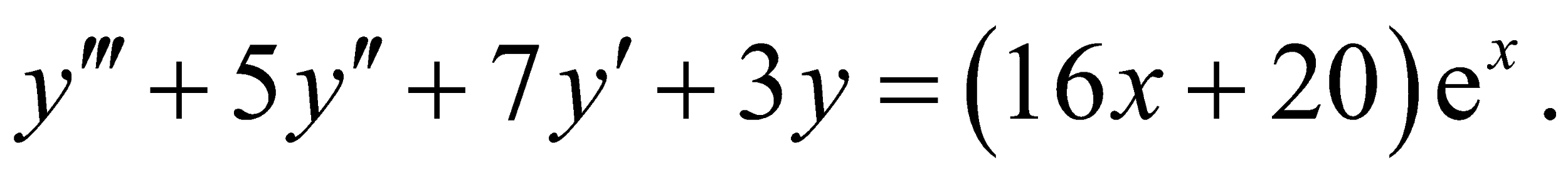
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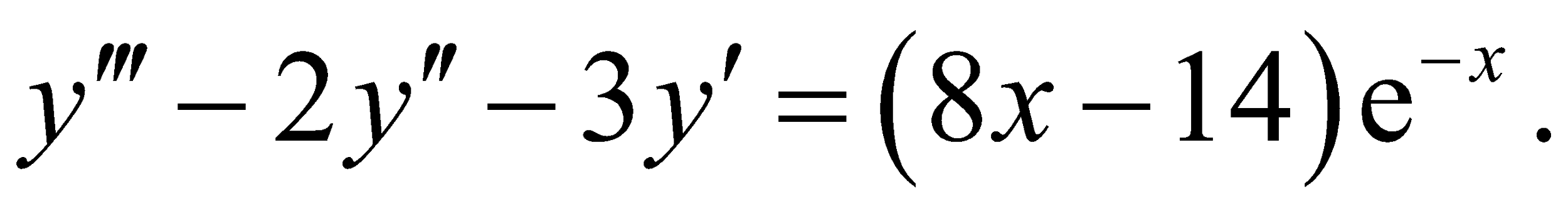
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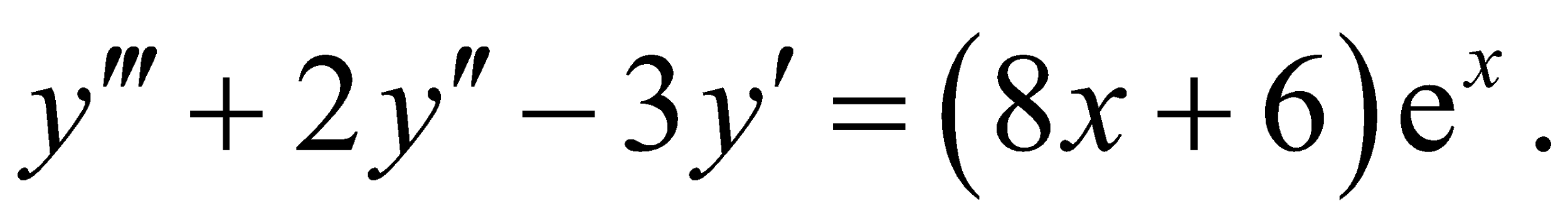
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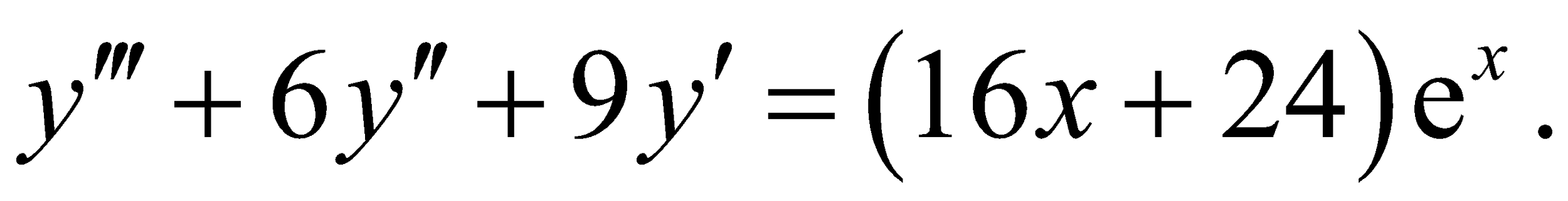
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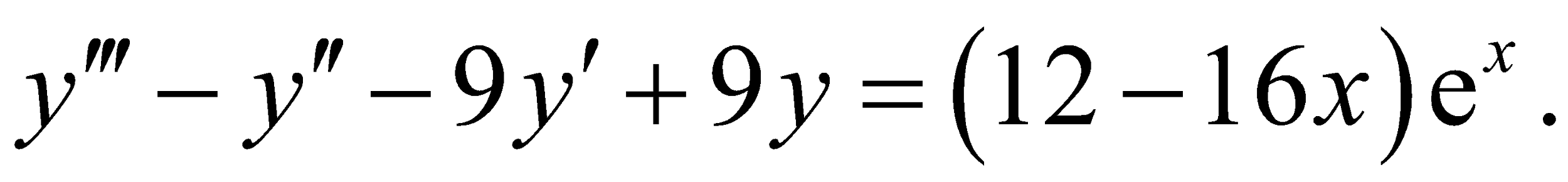
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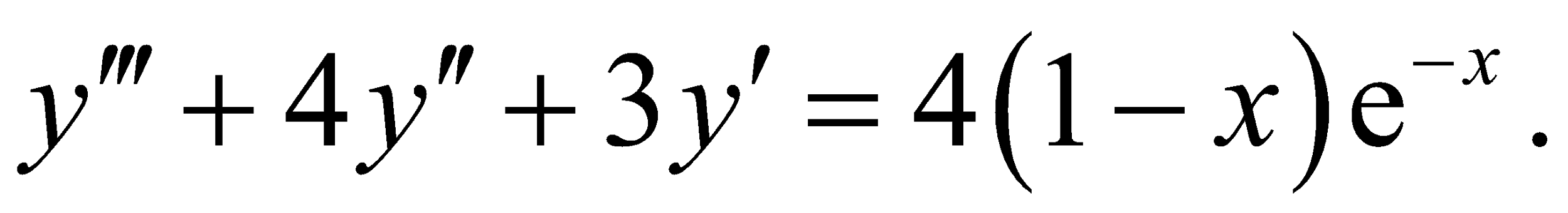
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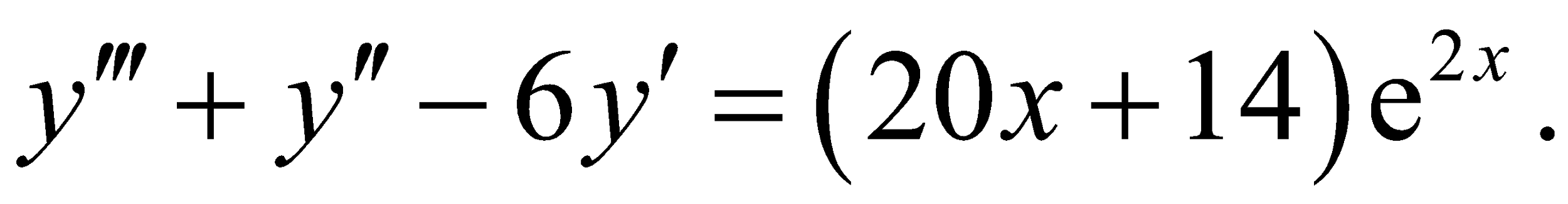
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4.27. 

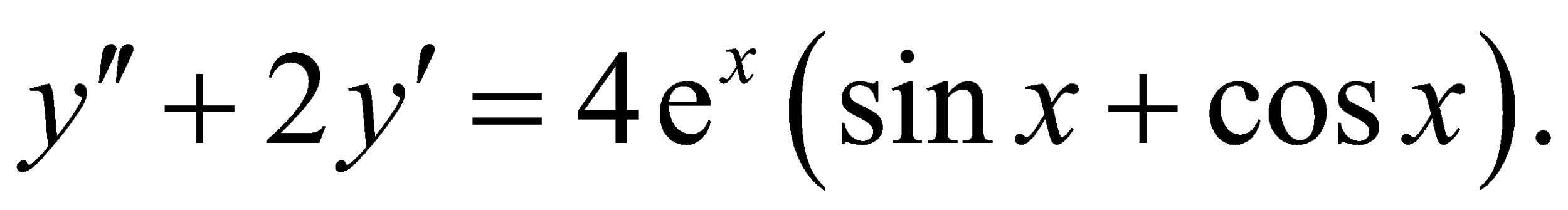
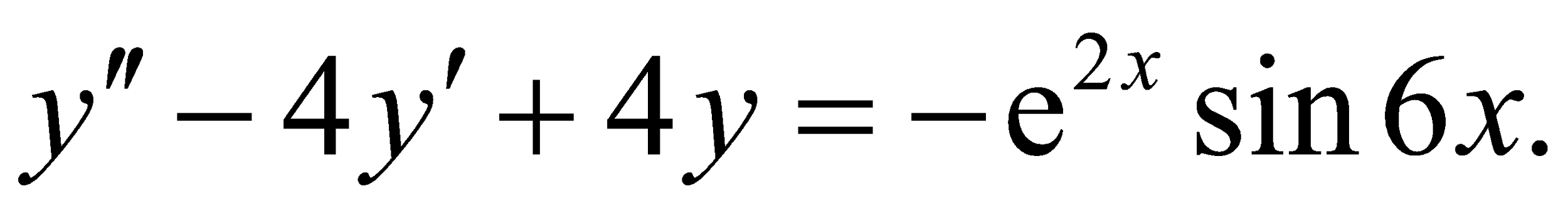
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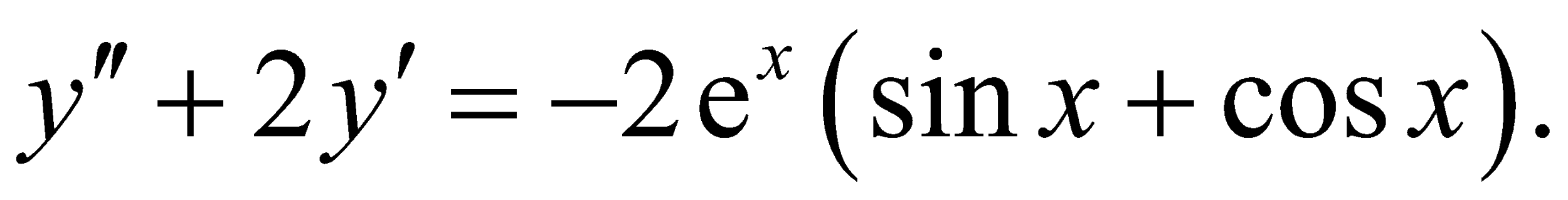
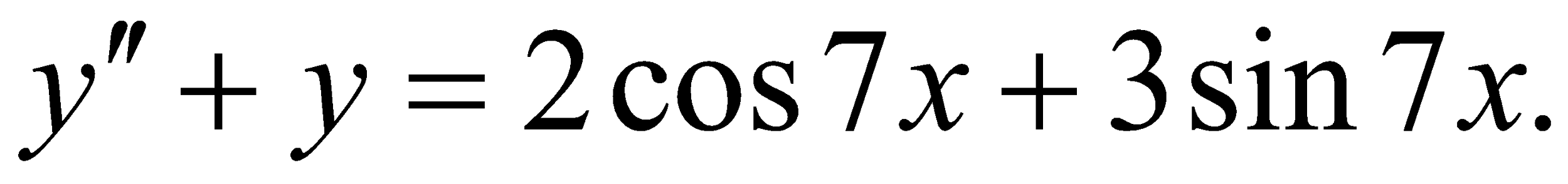
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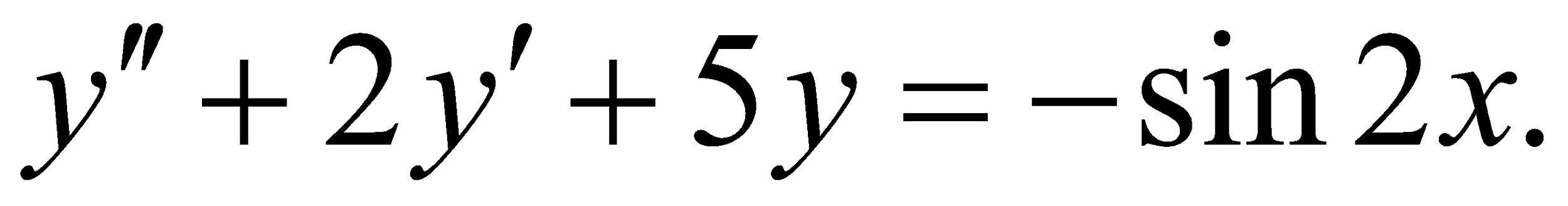
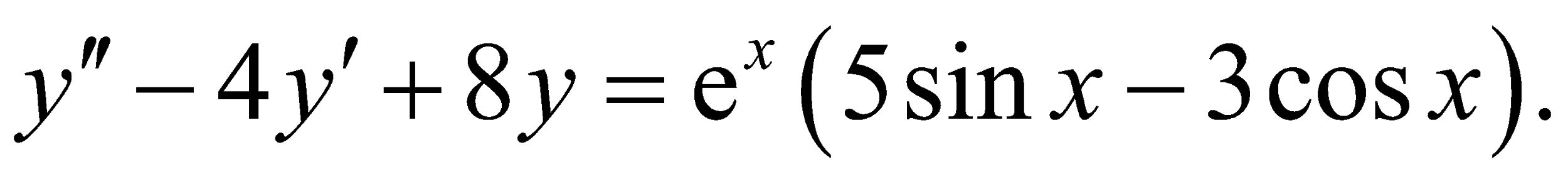
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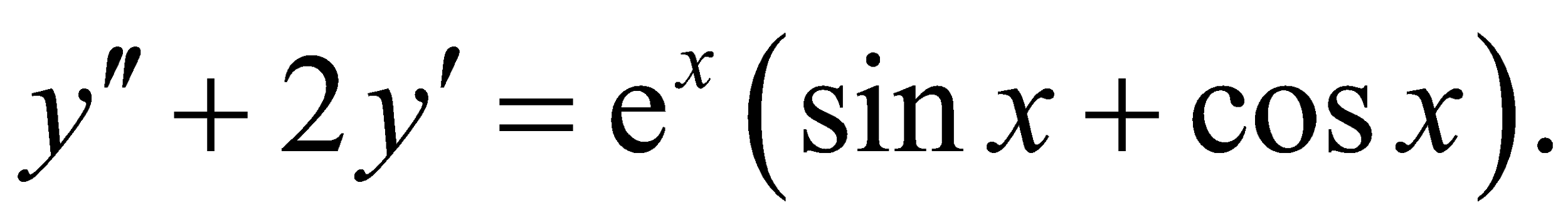
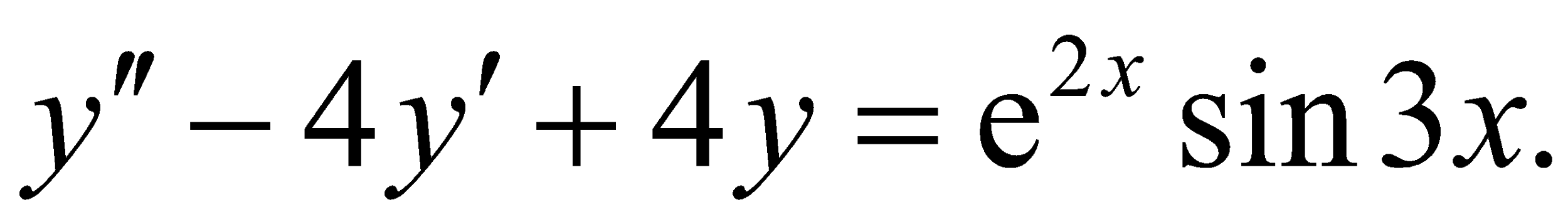
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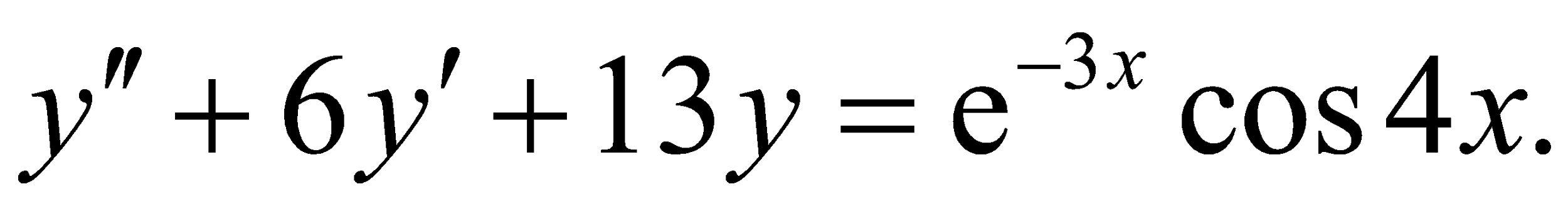
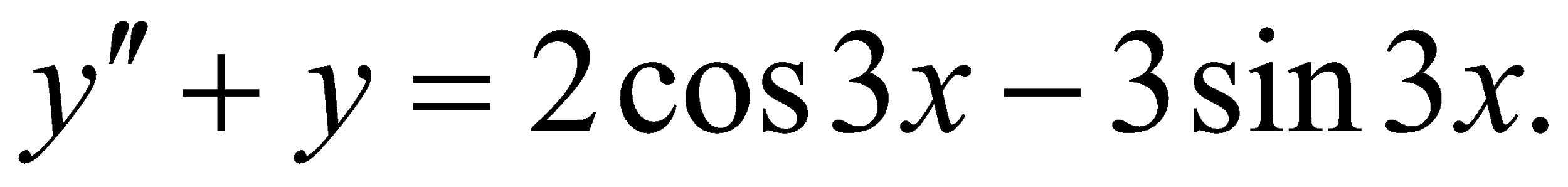
**Задача 5** Знайти загальний розв’язок диференціального рівняння.

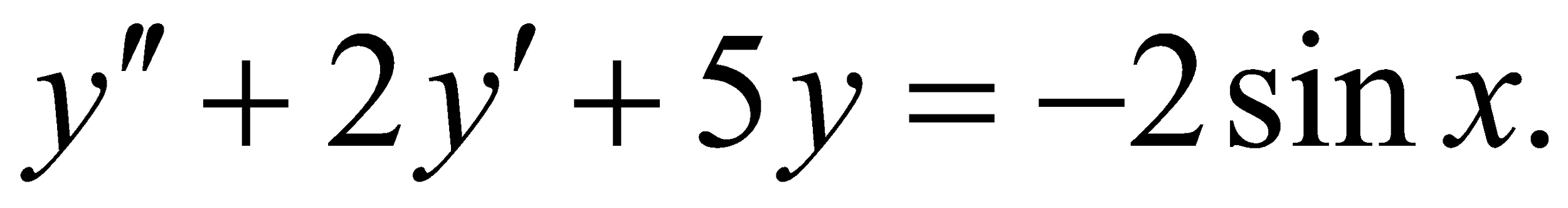
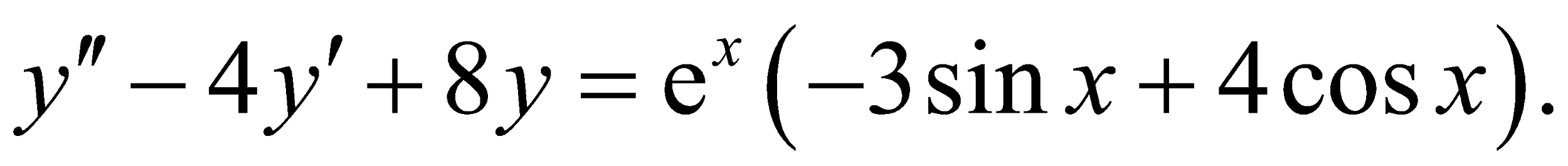
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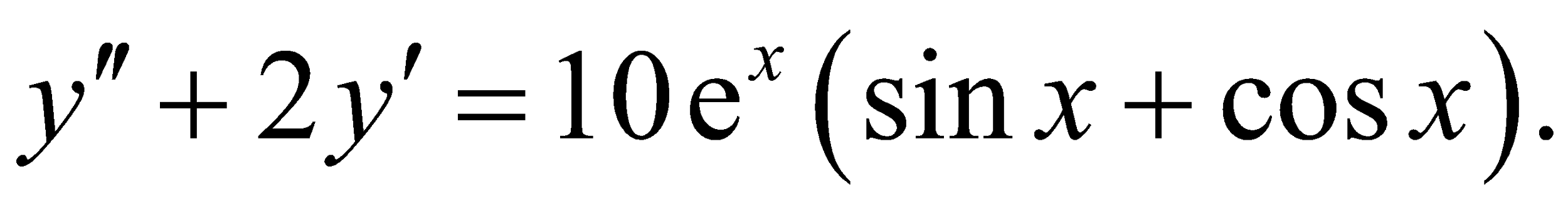
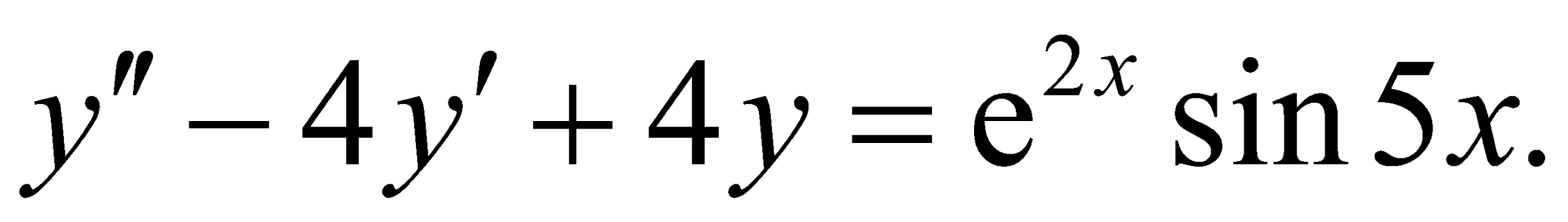
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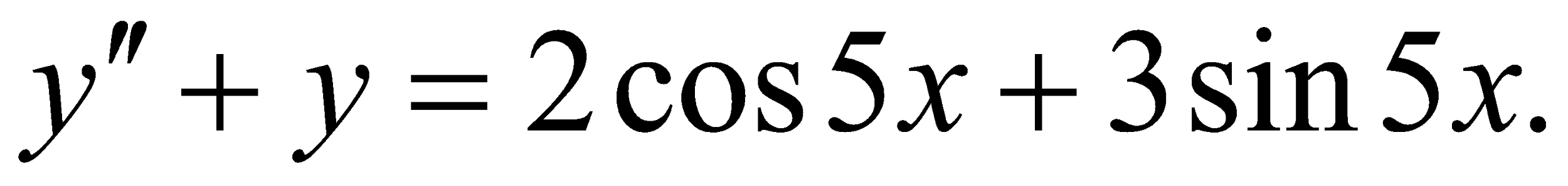
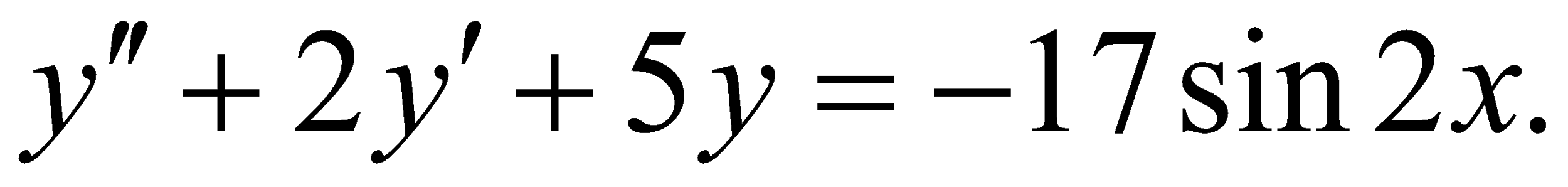
5.5.  5.6. 

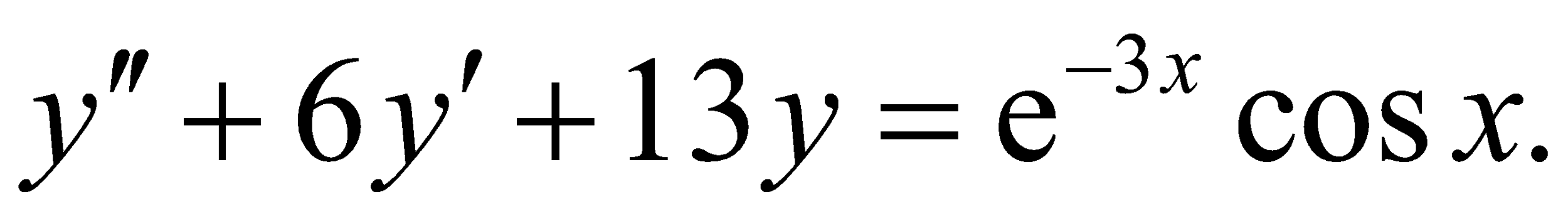
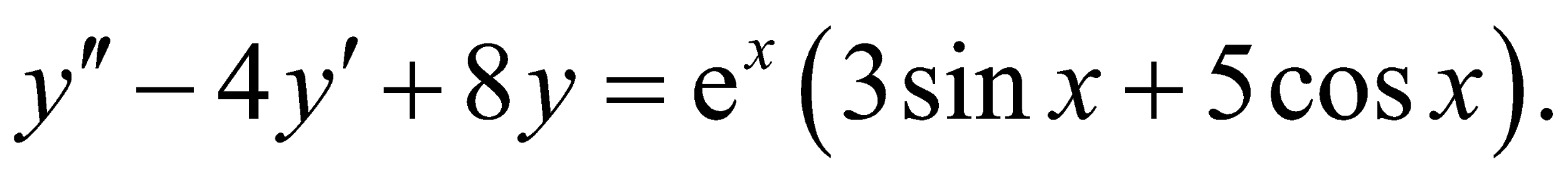
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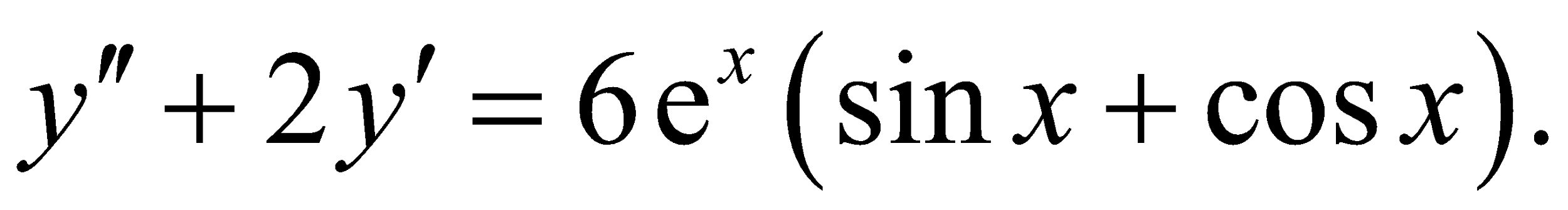
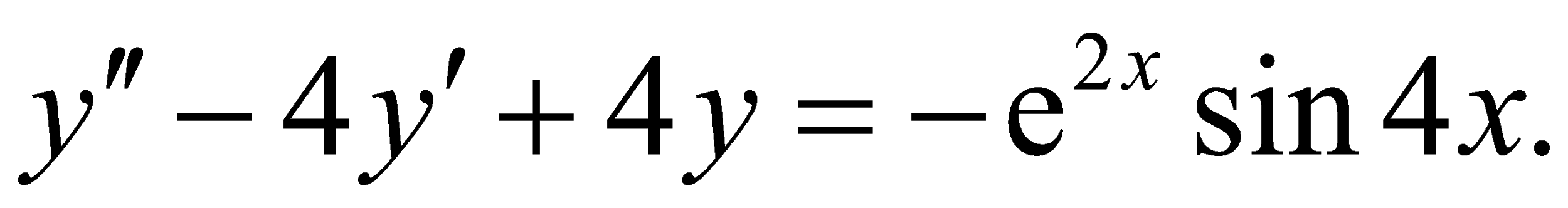
5.9.  5.10. 

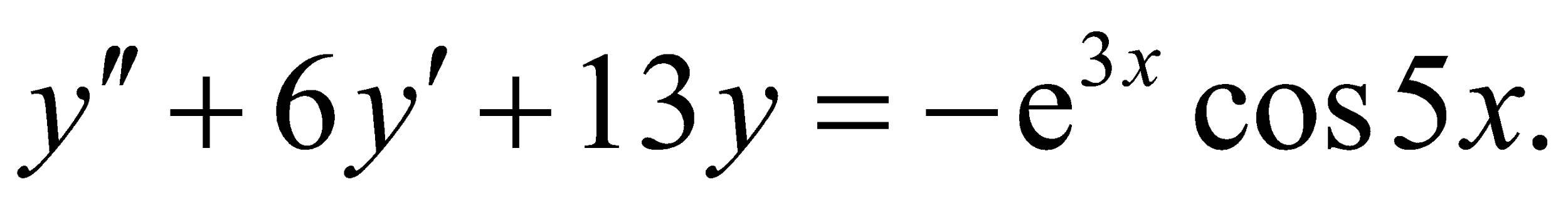
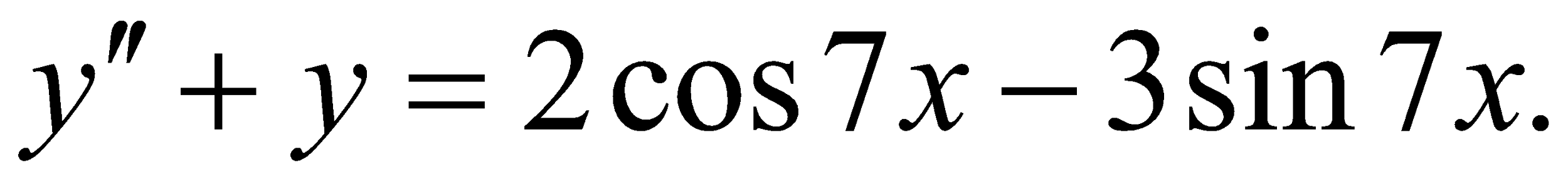
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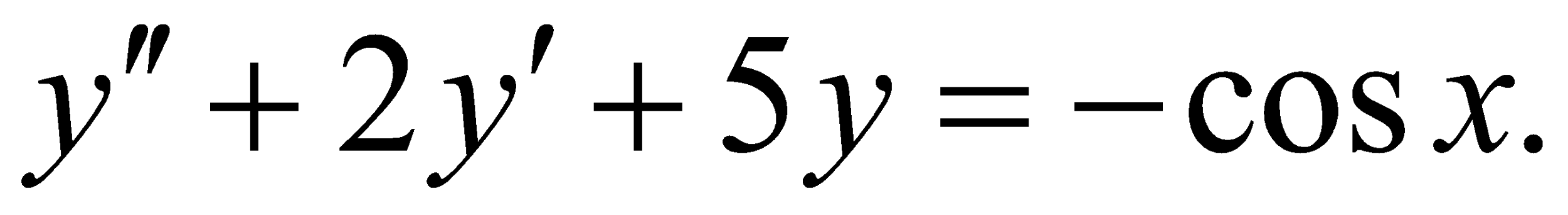
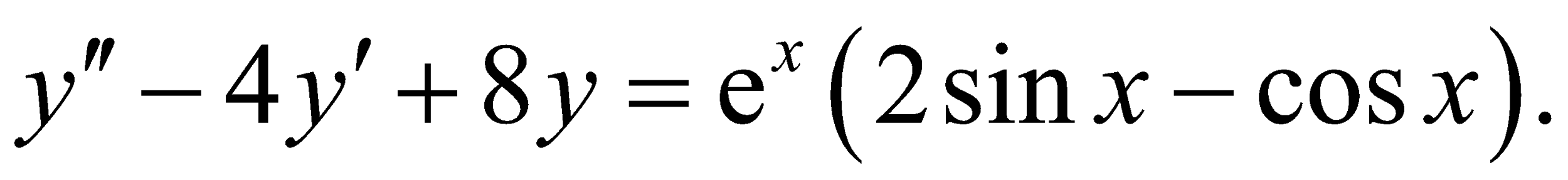
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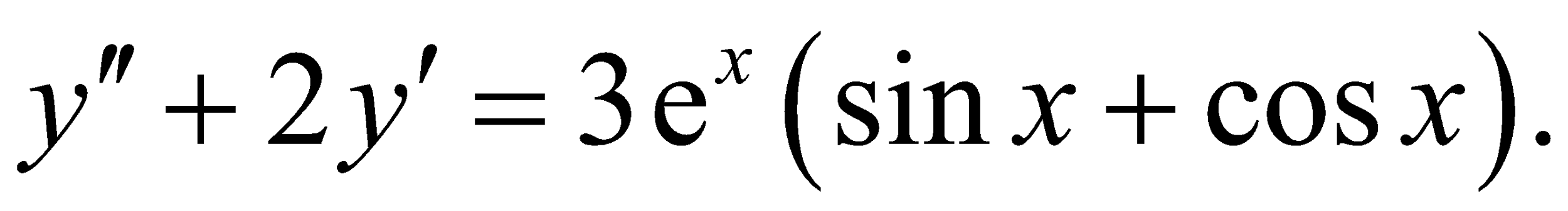
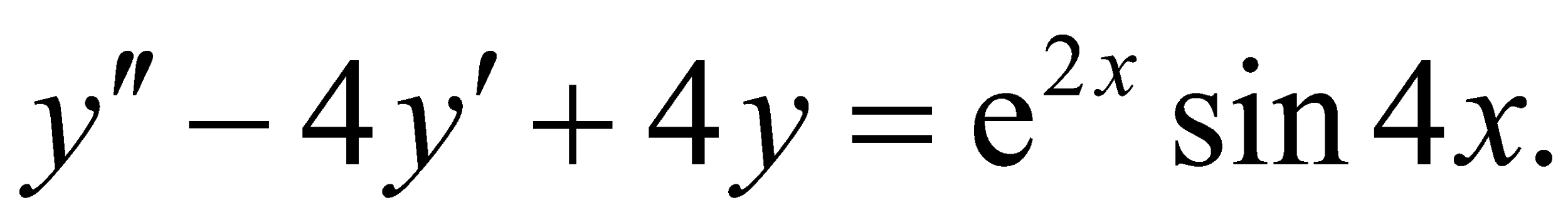
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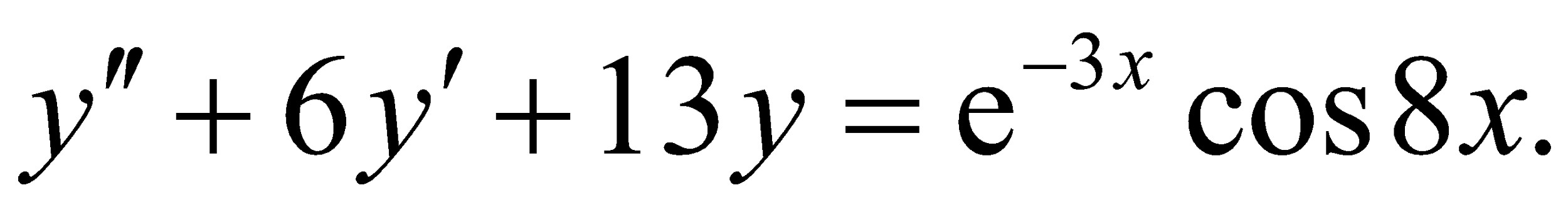
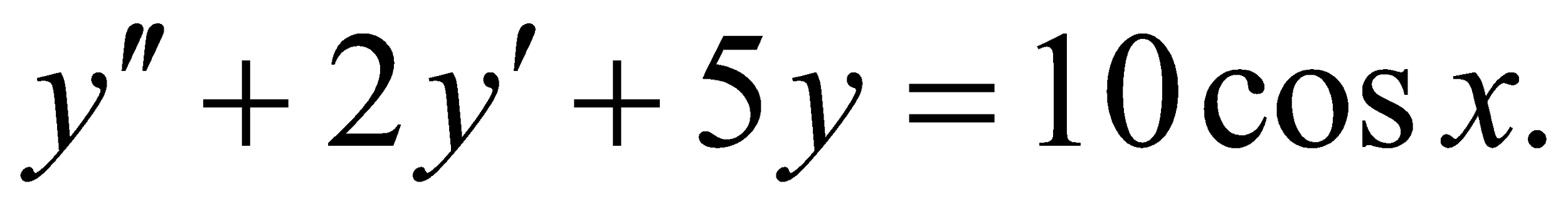
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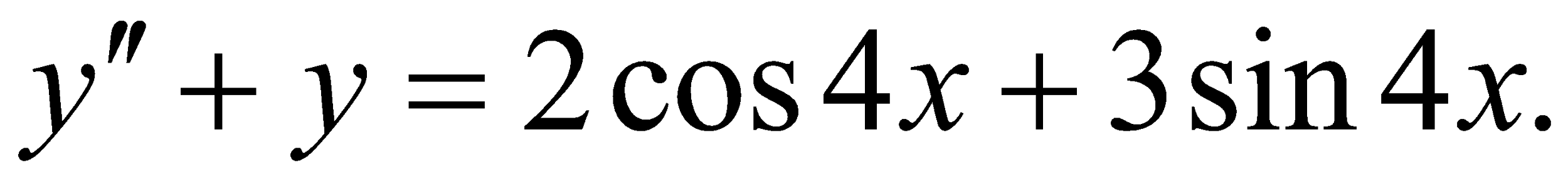
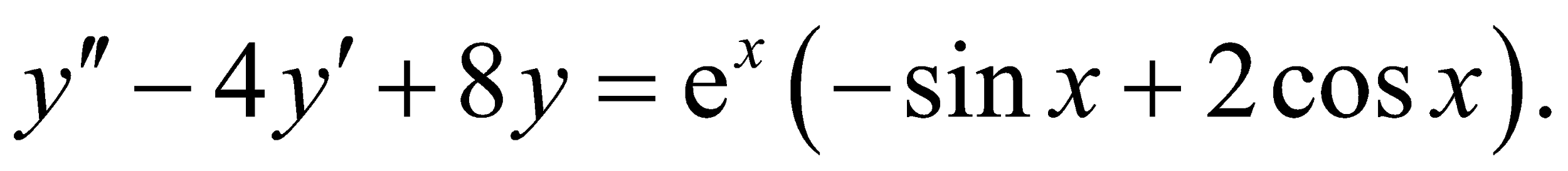
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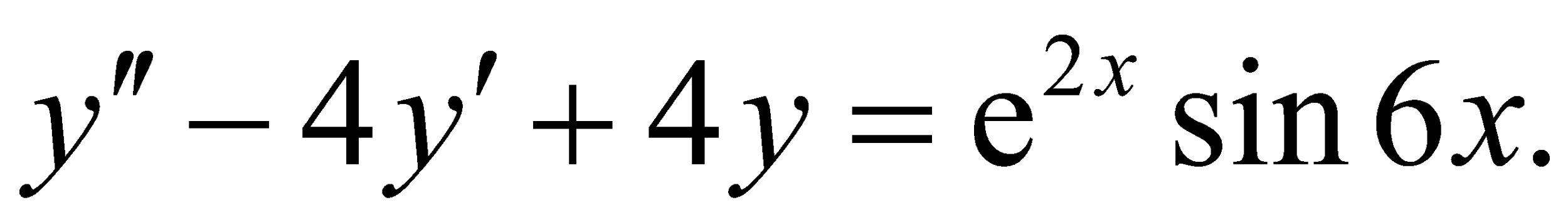
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5.23.  5.24. 

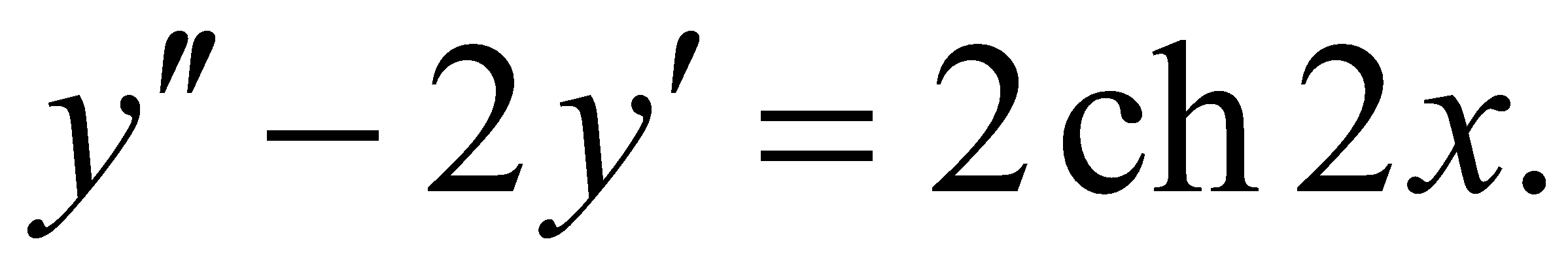
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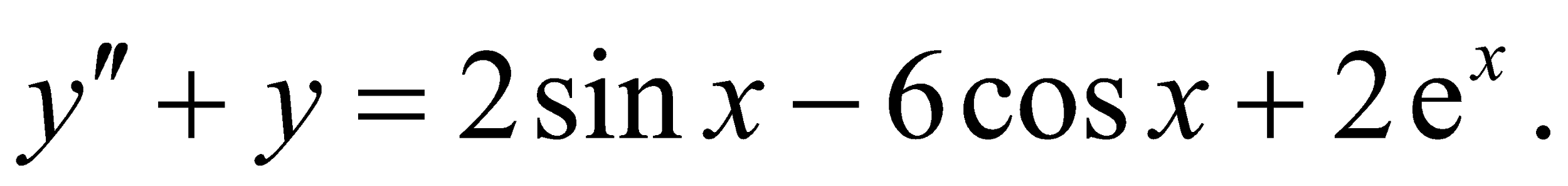
5.27.  5.28. 

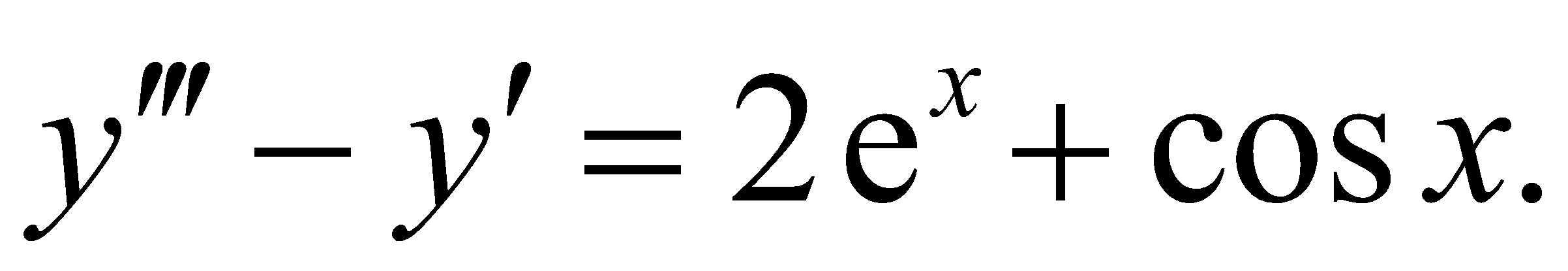
5.29.  5.30. 

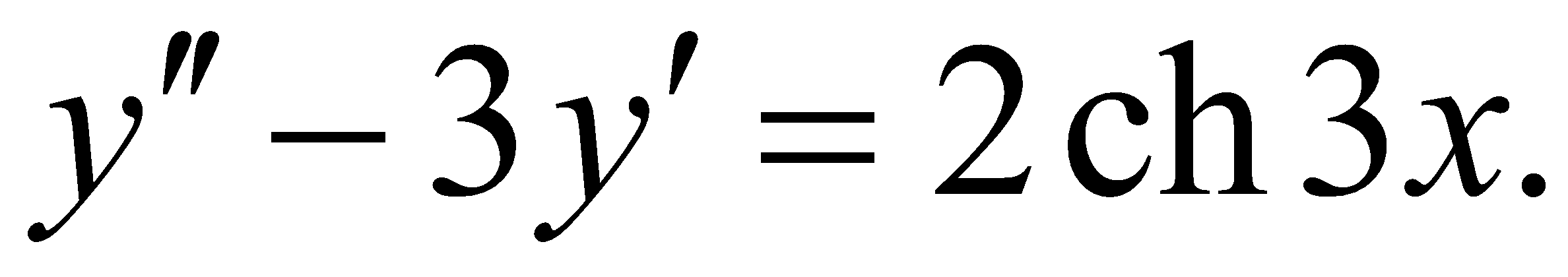
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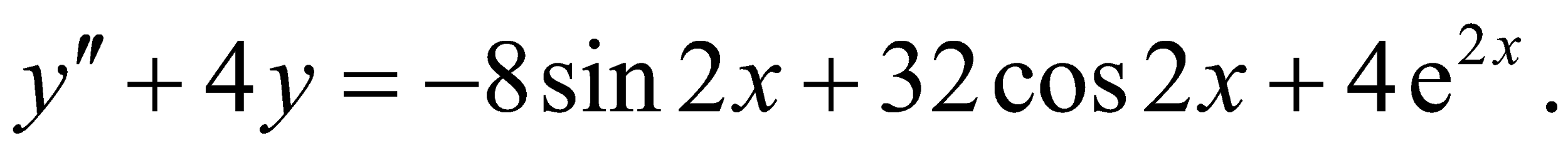
**Задача 6**. Знайти загальний розв’язок диференціального рівняння.

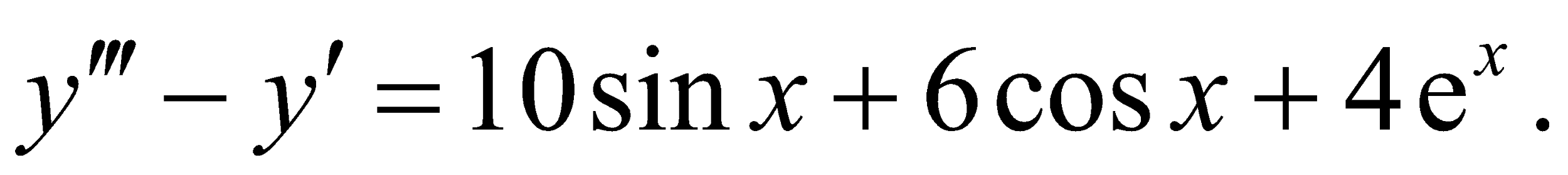
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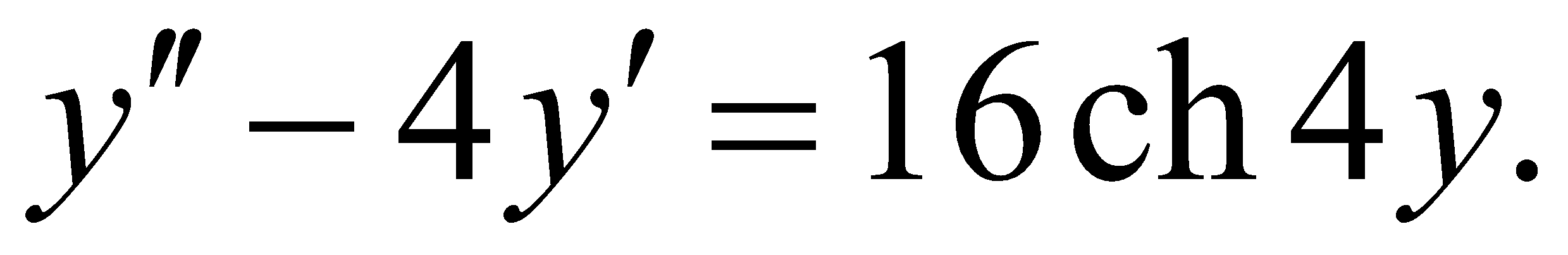
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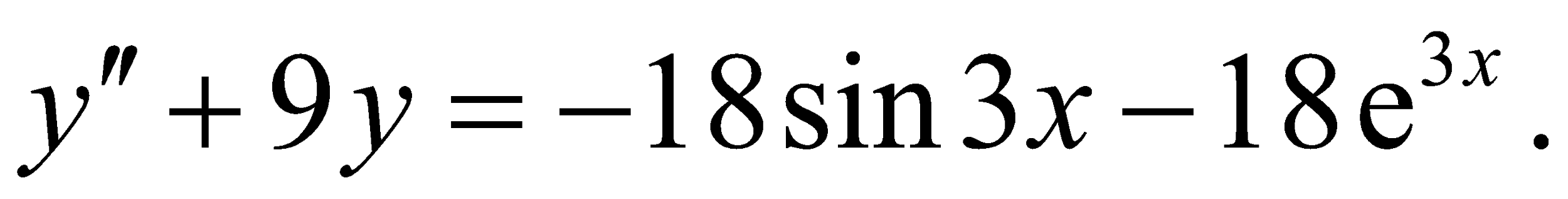
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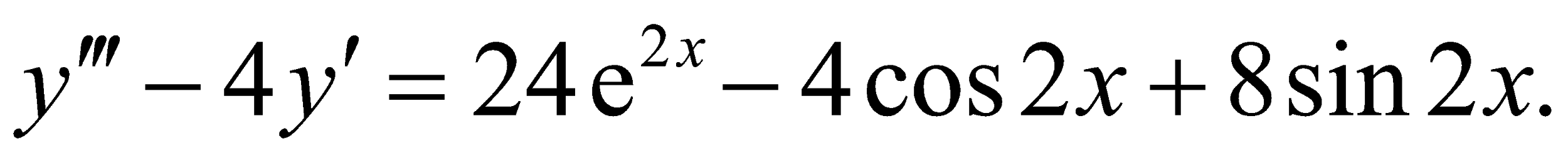
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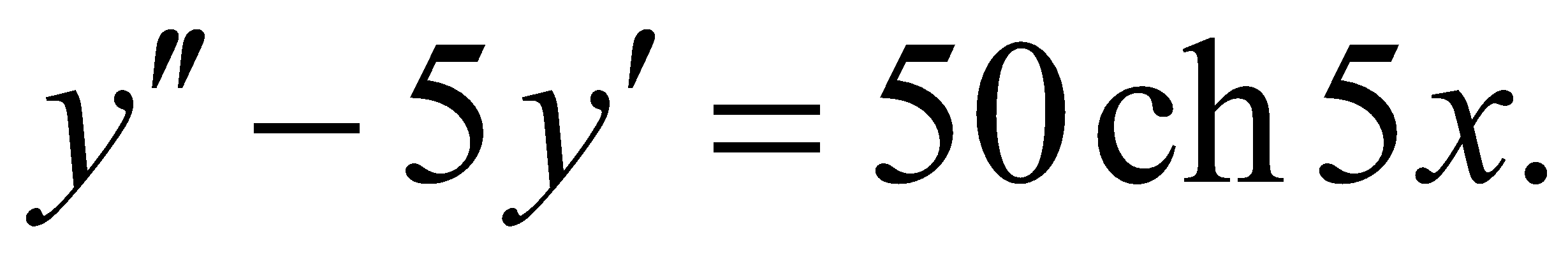
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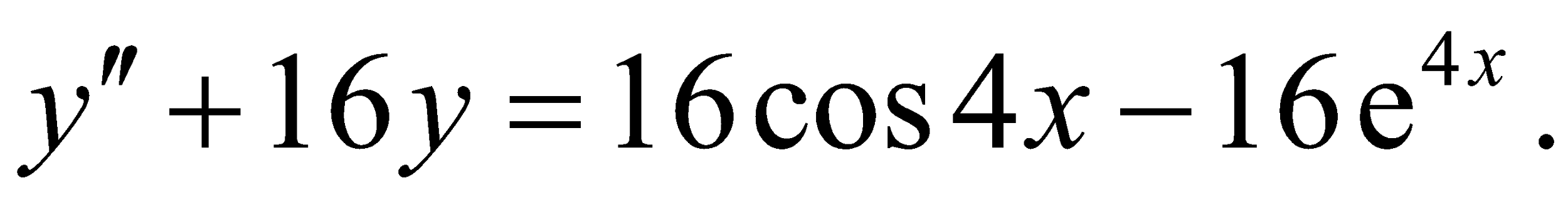
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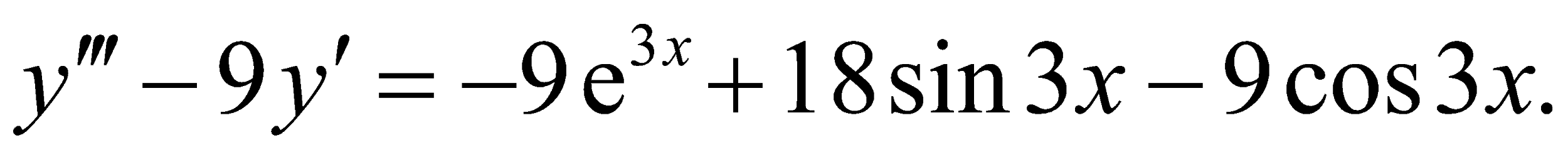
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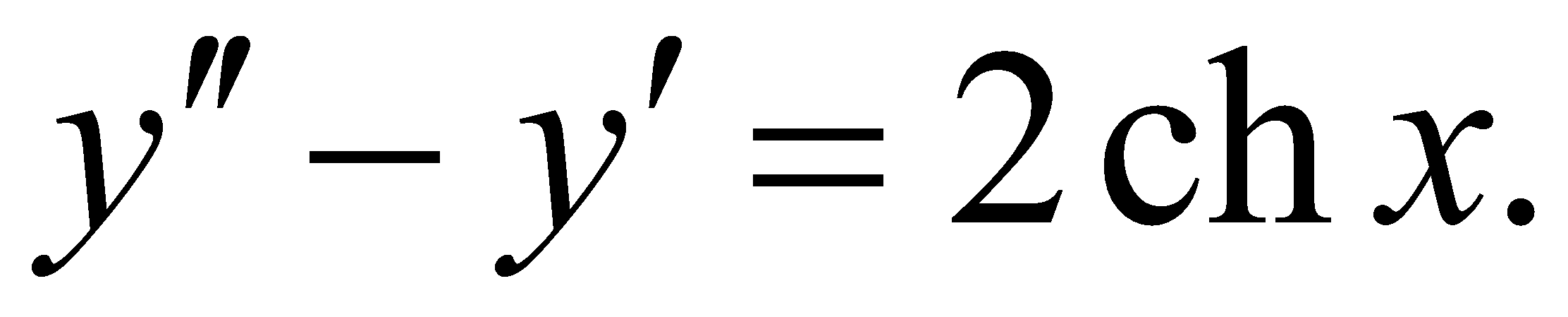
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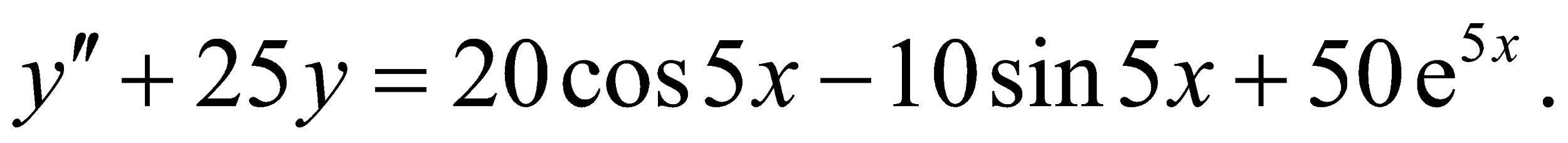
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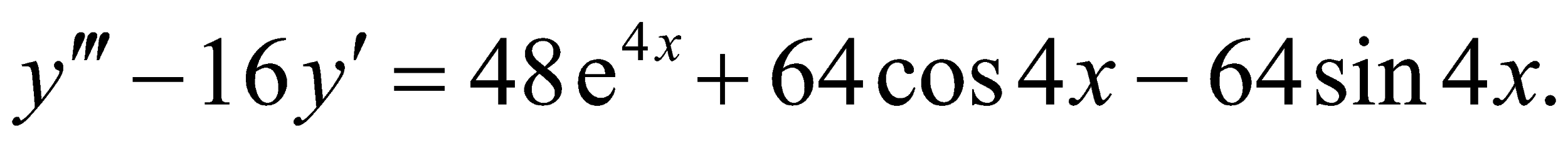
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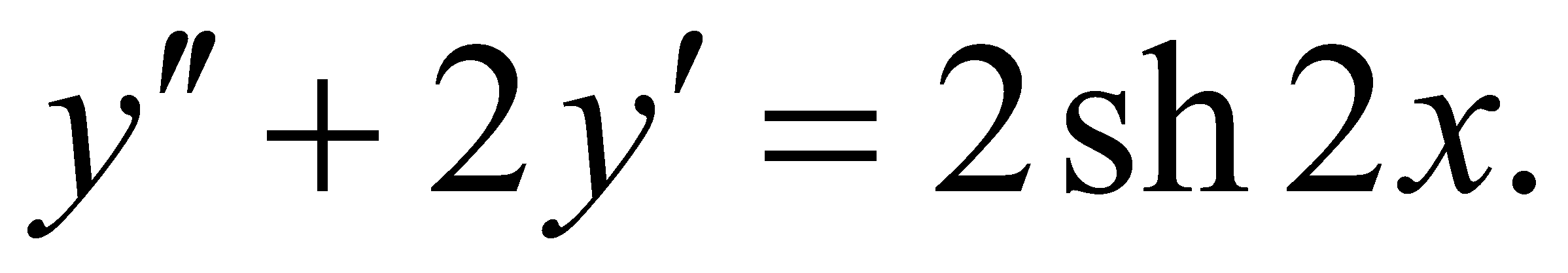
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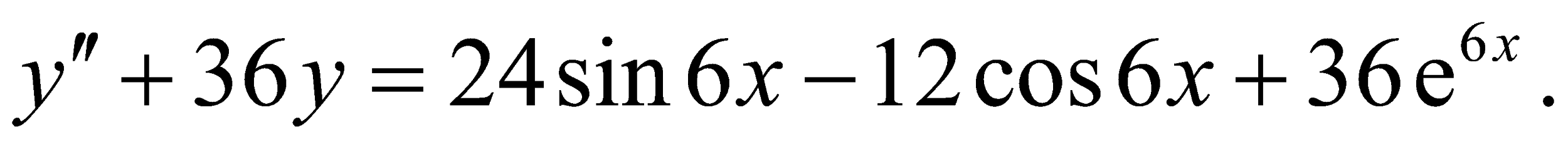
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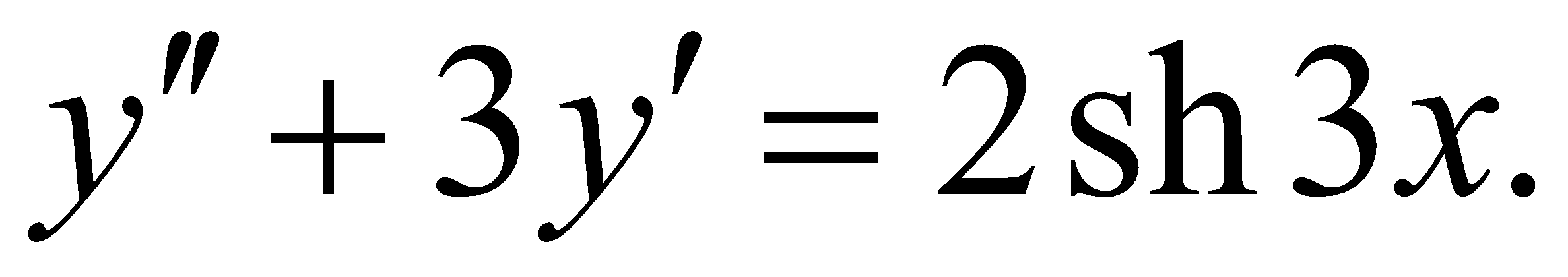
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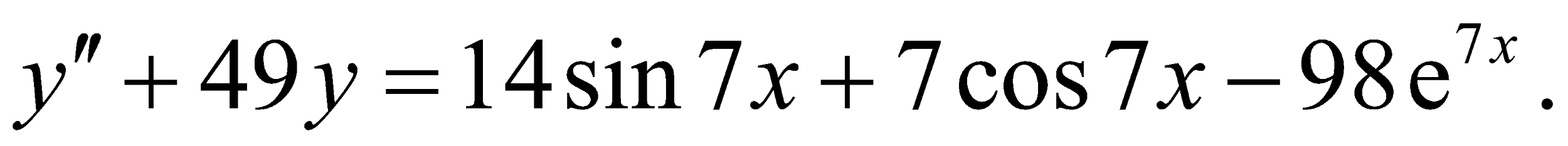
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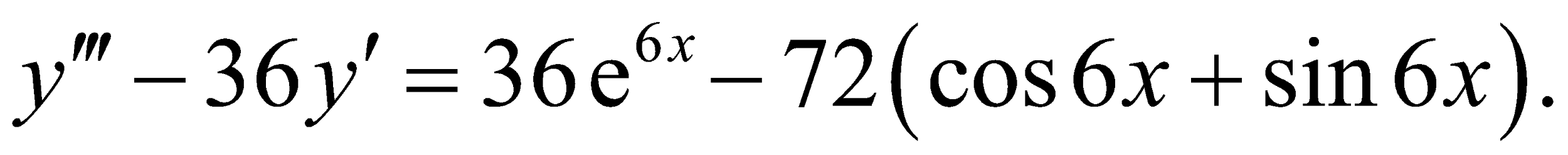
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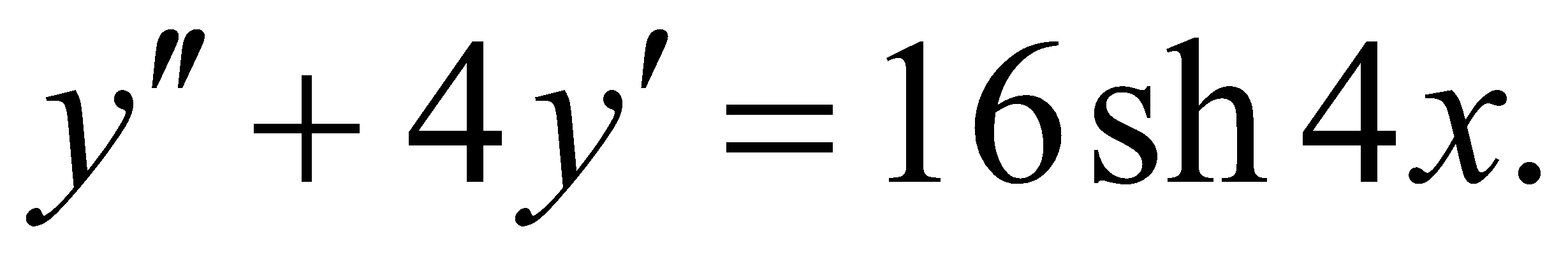
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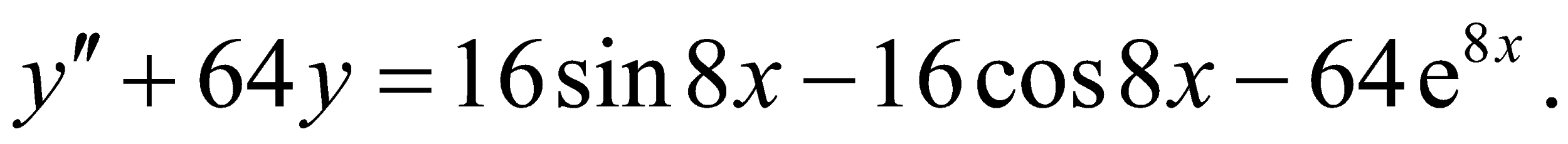
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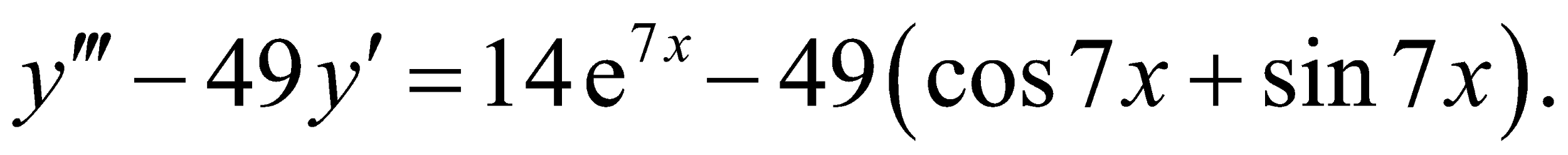
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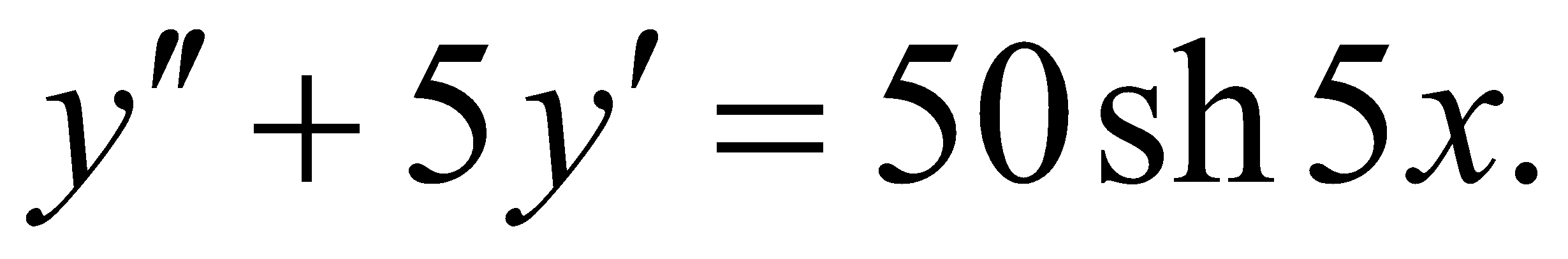
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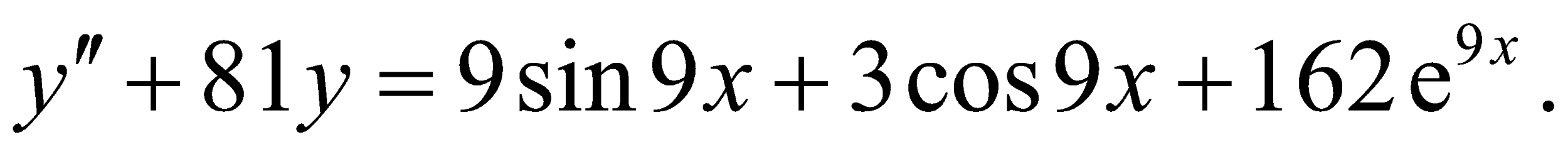
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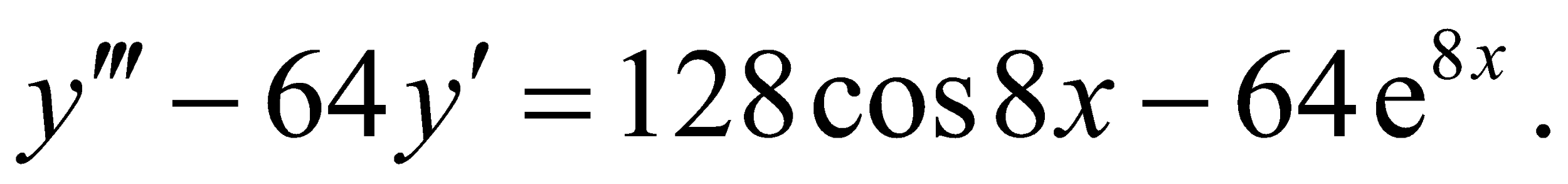
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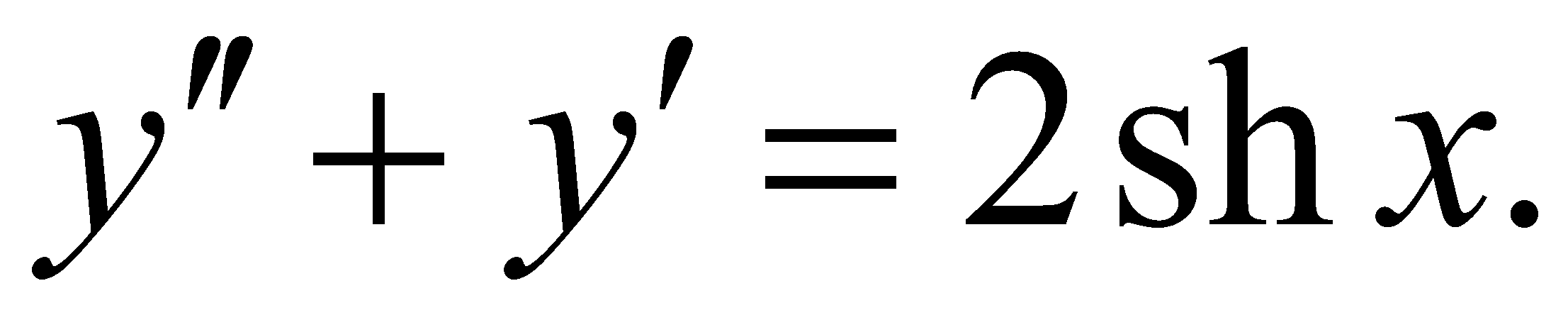
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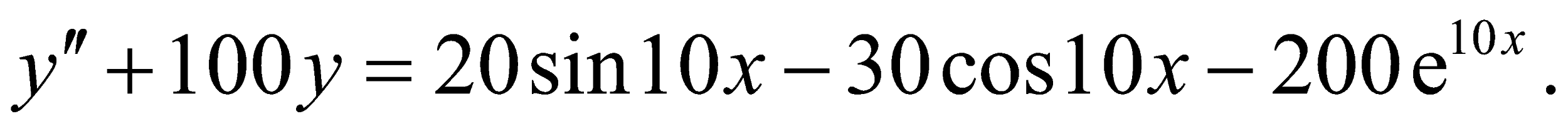
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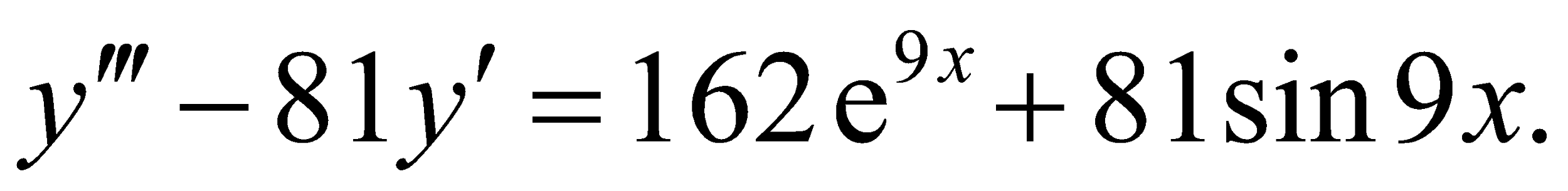
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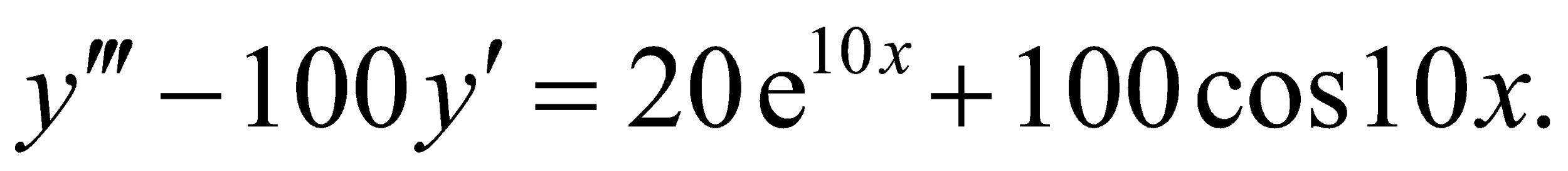
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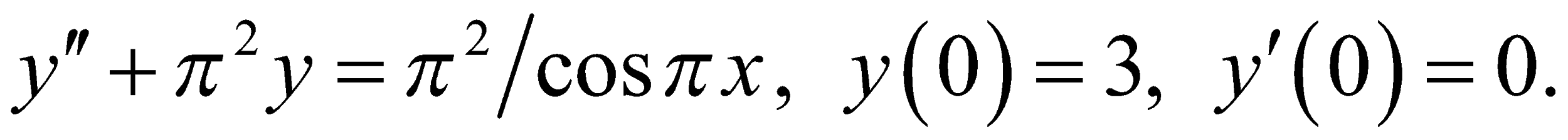
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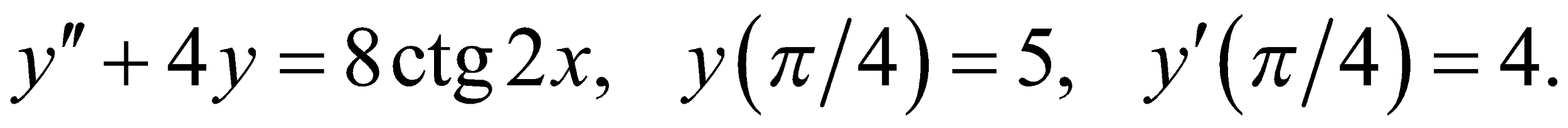
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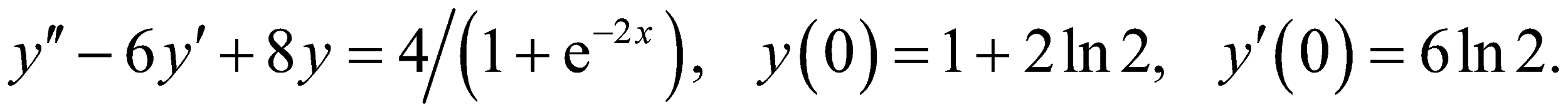
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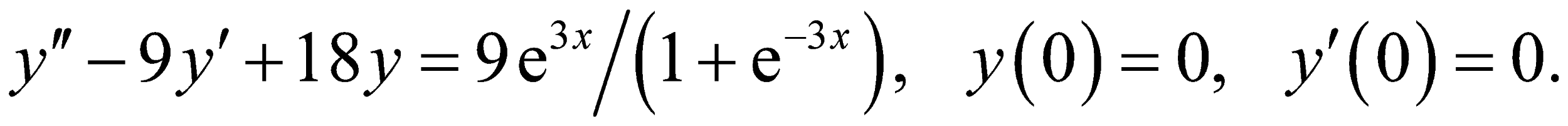
**Задача 7**. Знайти розв’язок задачі Коши.

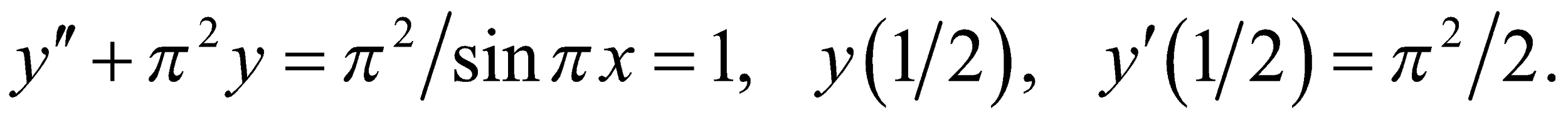
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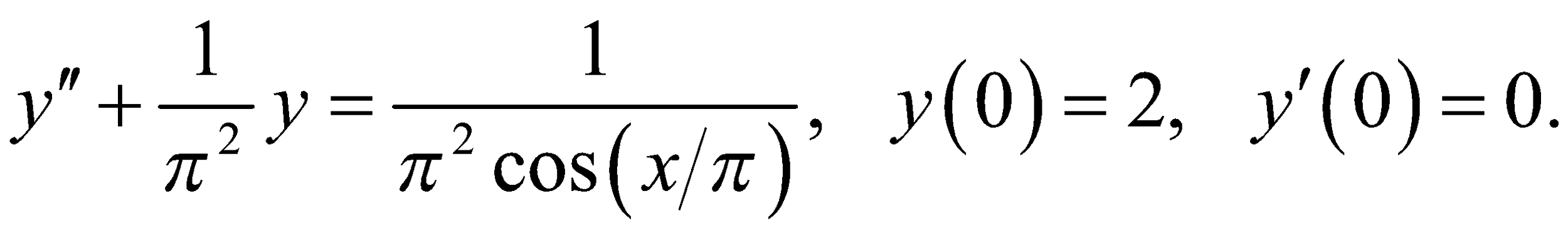
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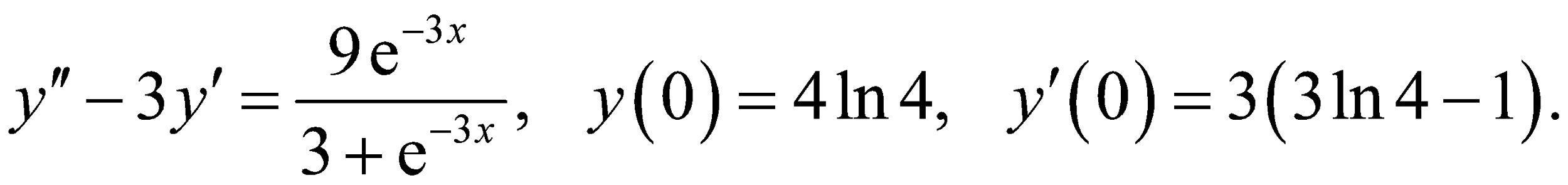
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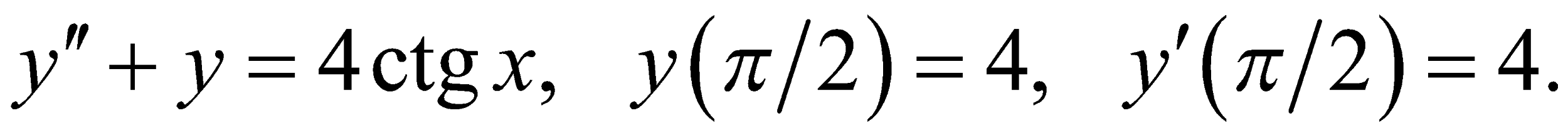
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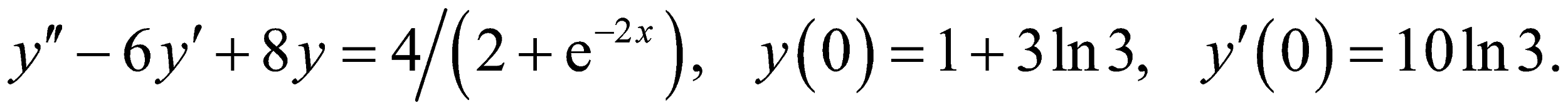
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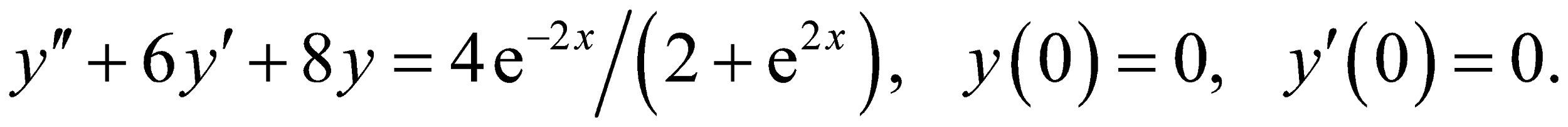
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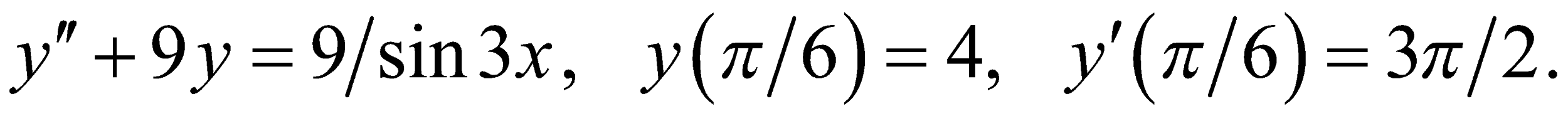
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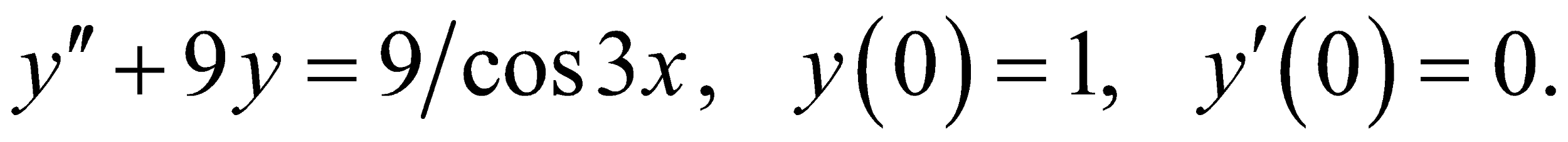
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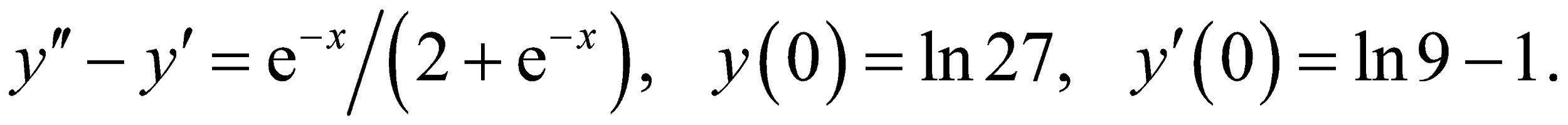
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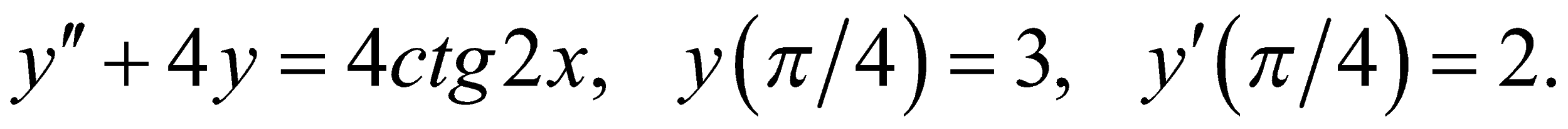
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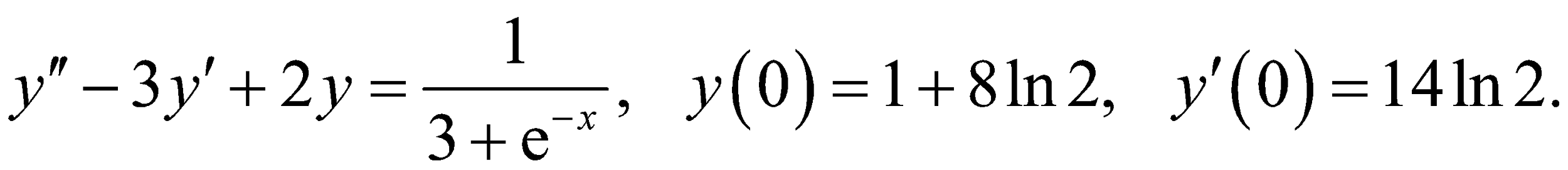
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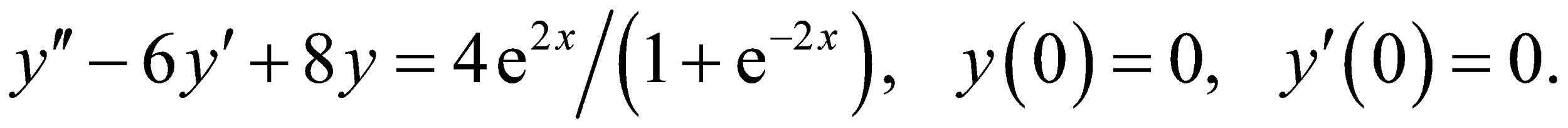
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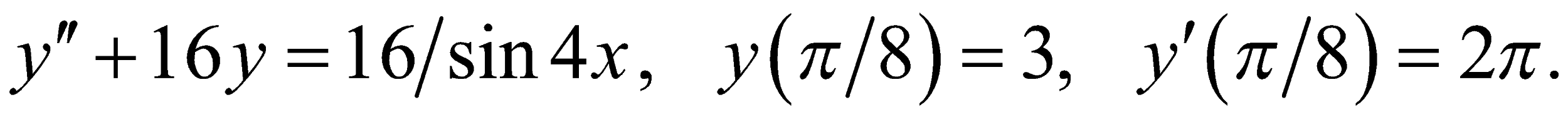
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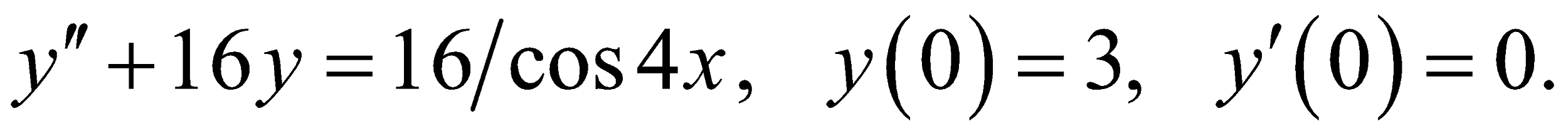
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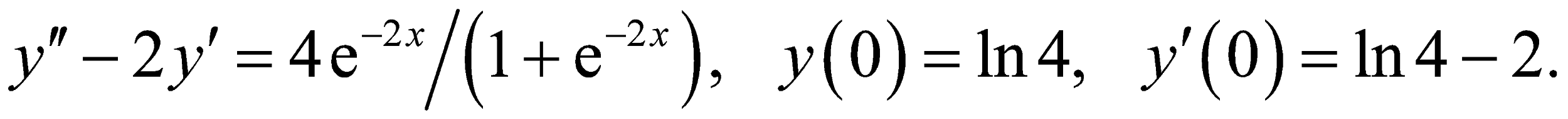
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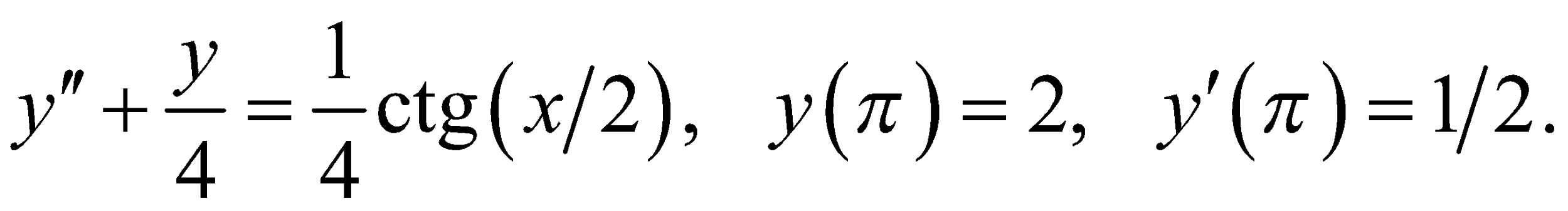
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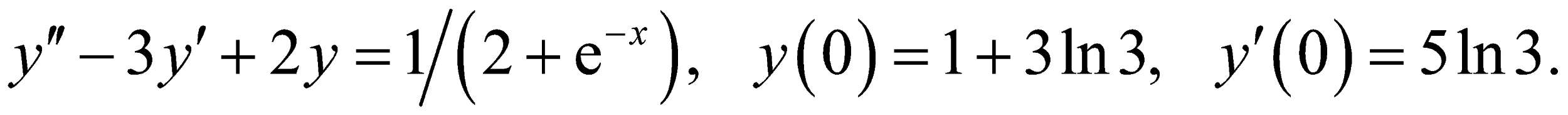
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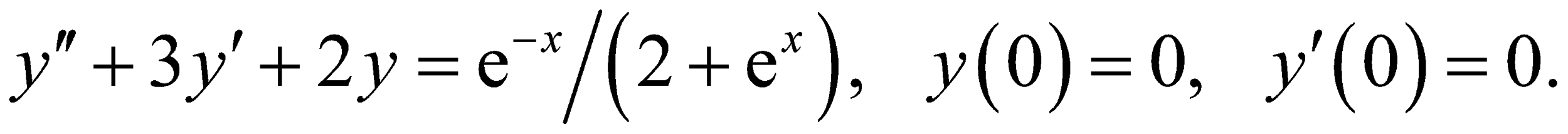
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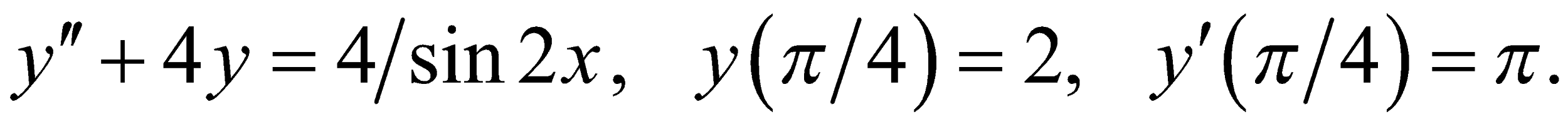
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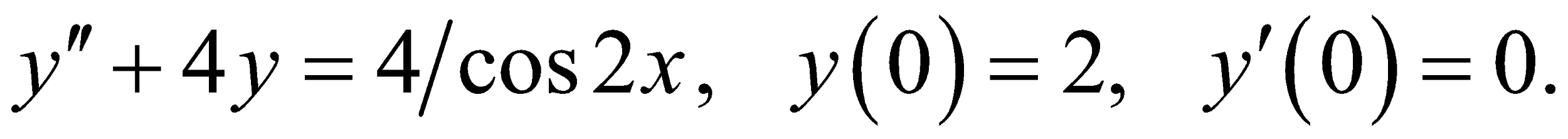
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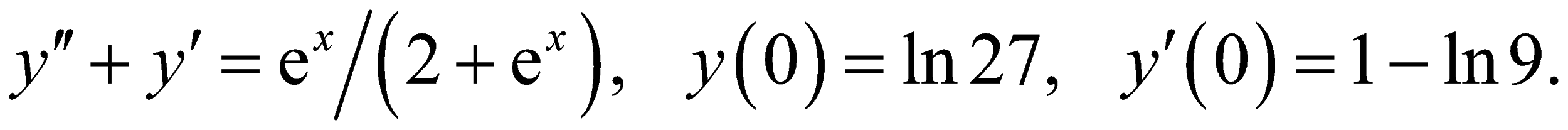
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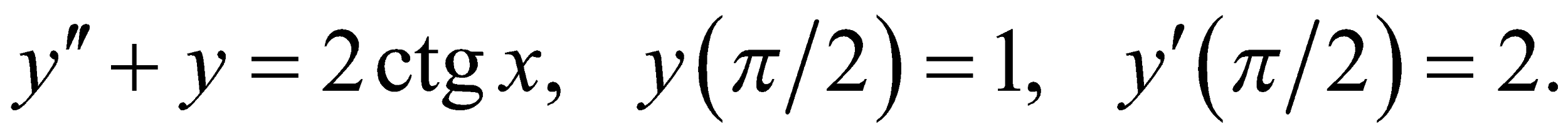
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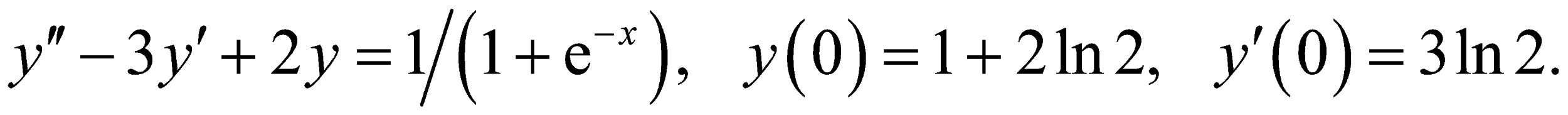
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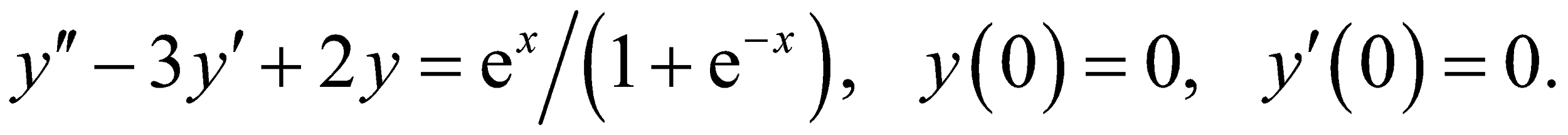
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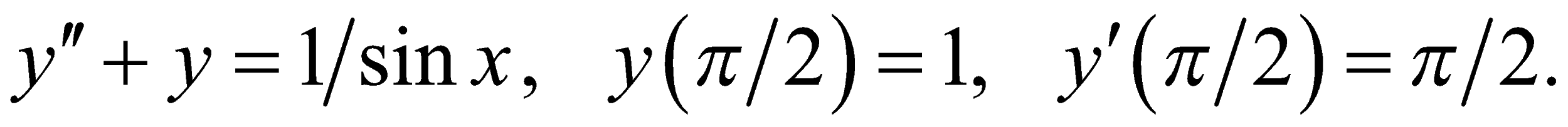
7.25. 

7.26. 

7.27. 

7.28. 

7.29. 

7.30. 

7.31. 