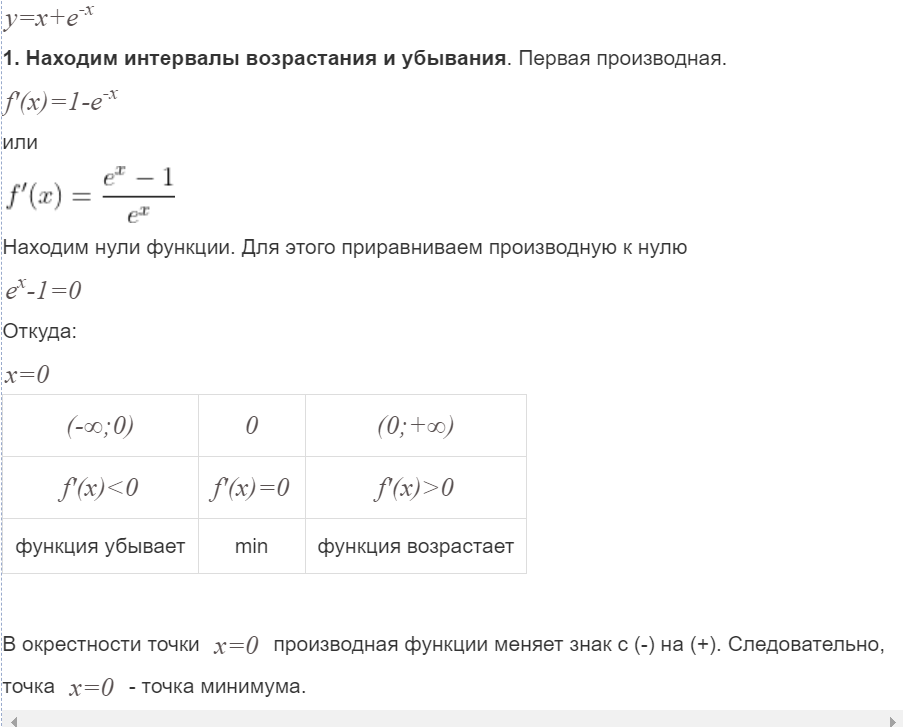


**РЕШЕНИЕ**

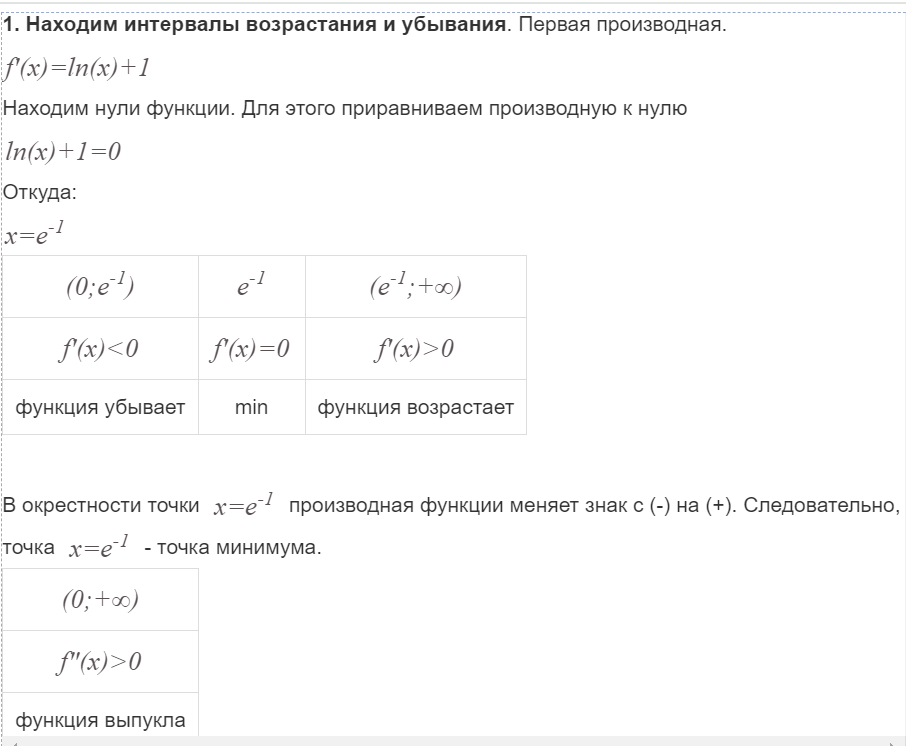
**ЗАДАЧА 1 Найти интервалы возрастания и убывания функций:**

**1.1.**

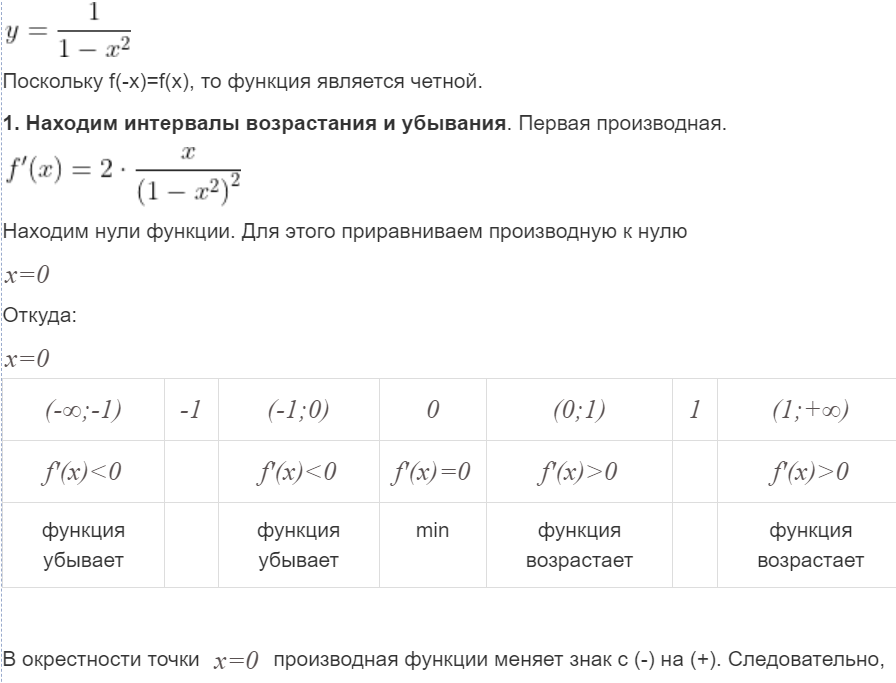
****

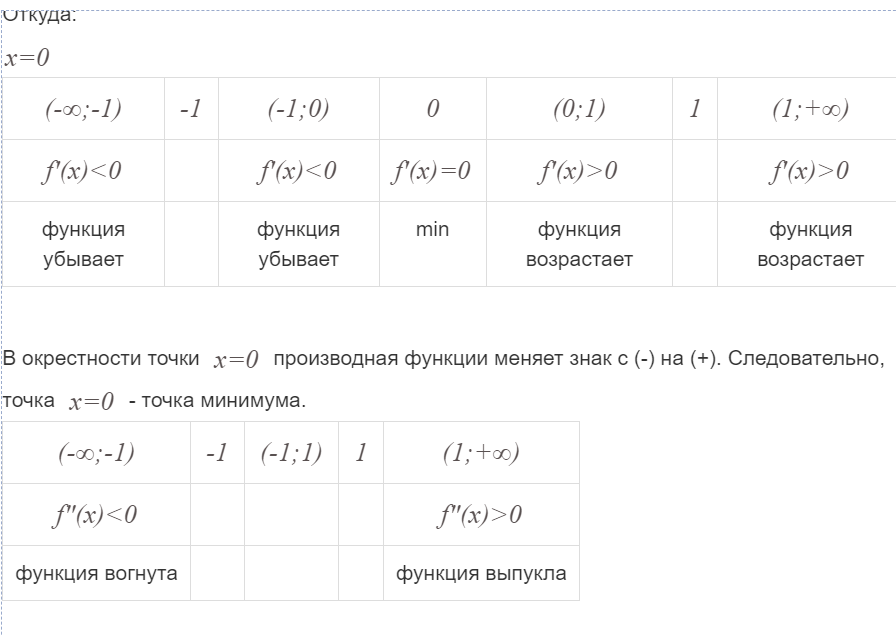
**1.2.**

f(x) = x \* ln x

****

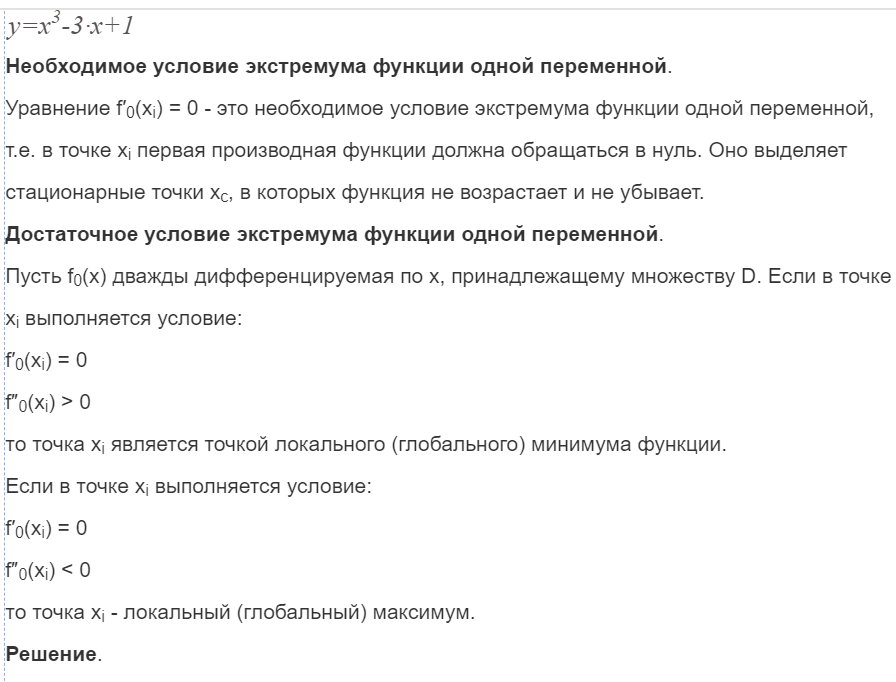
**1.3.**

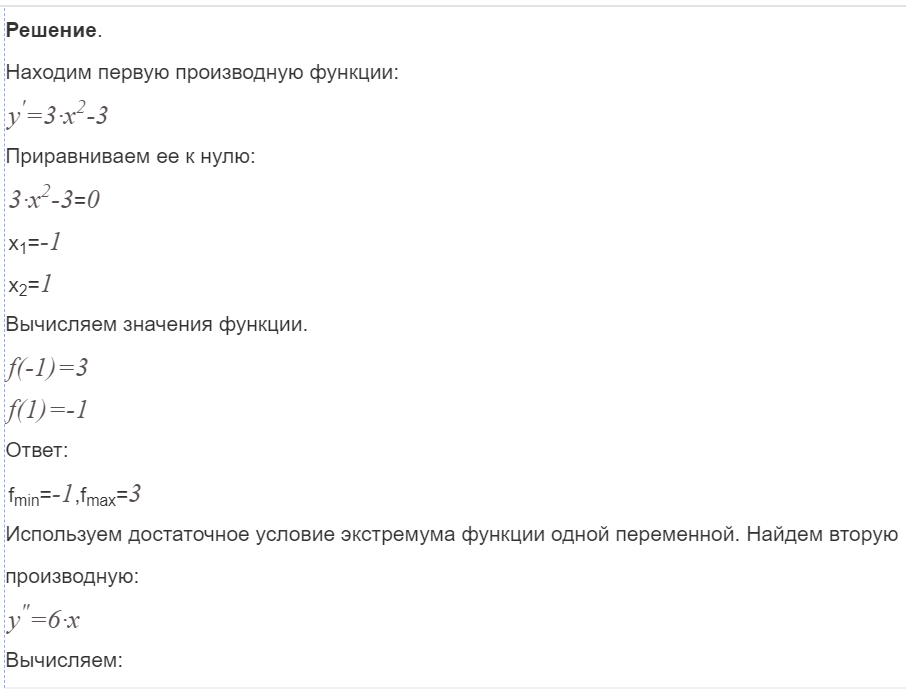
****

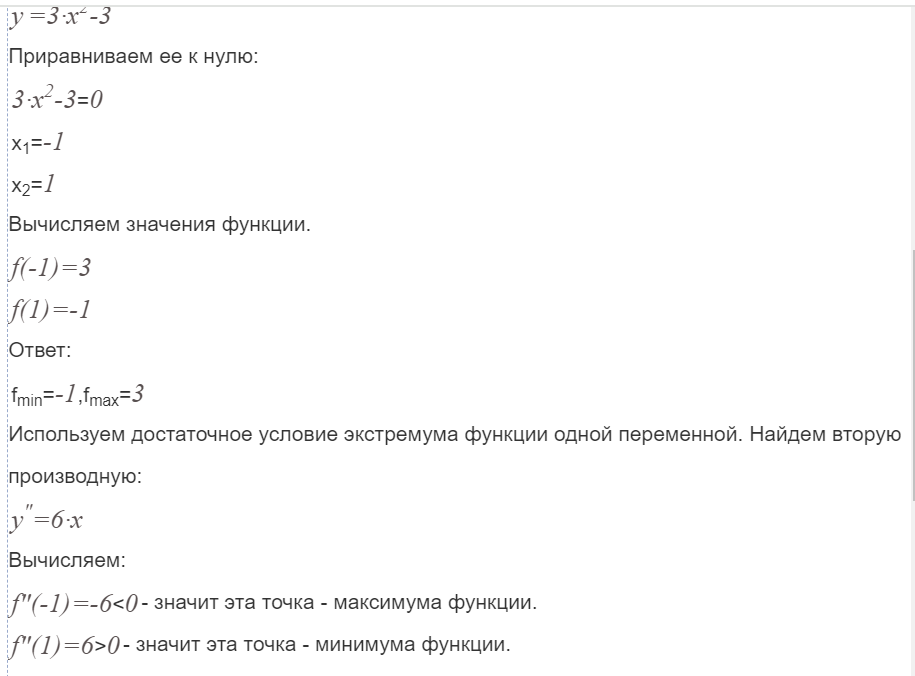
****

**ЗАДАЧА 2 Найти экстремумы функций:**

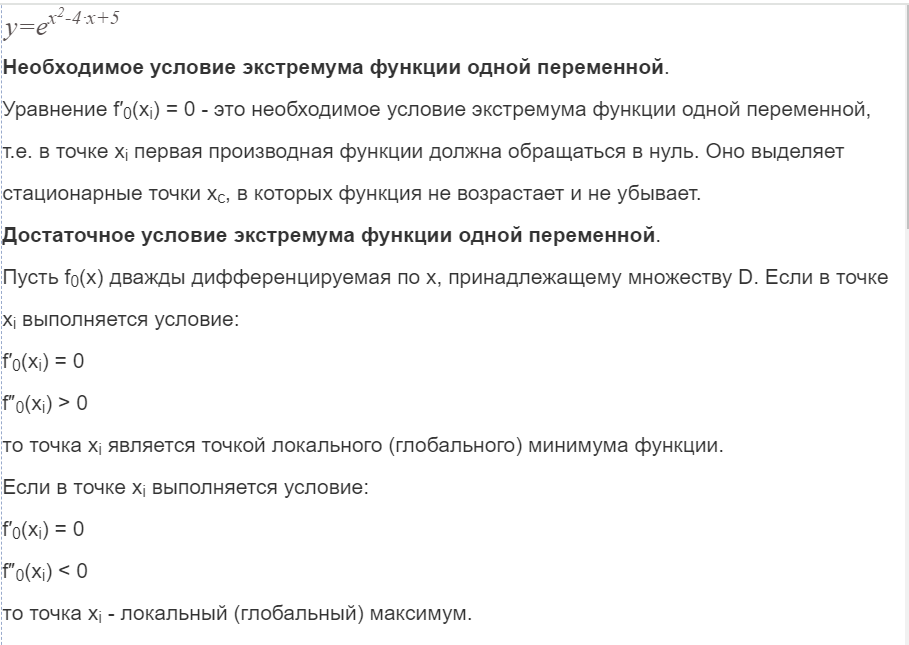
**2.1.**

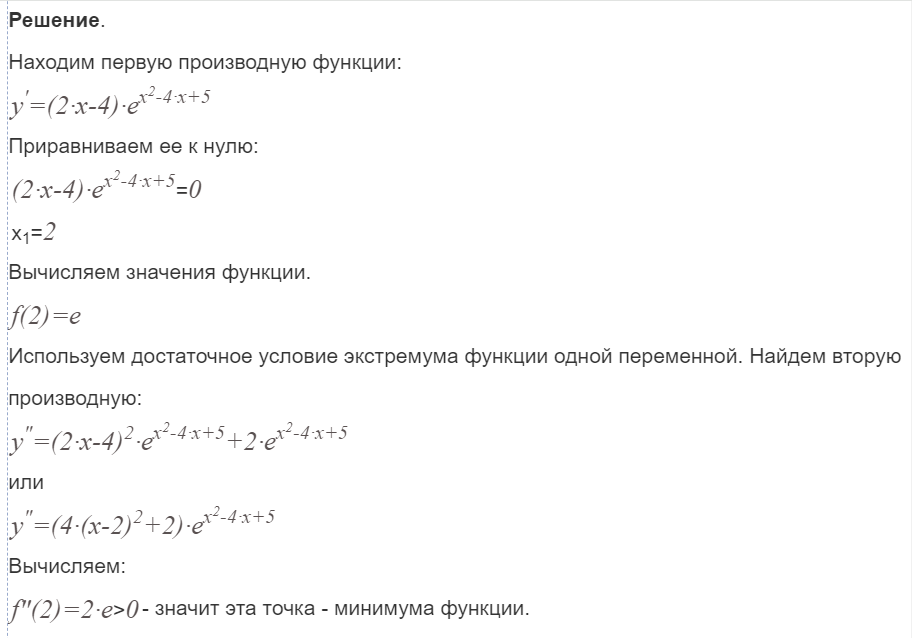
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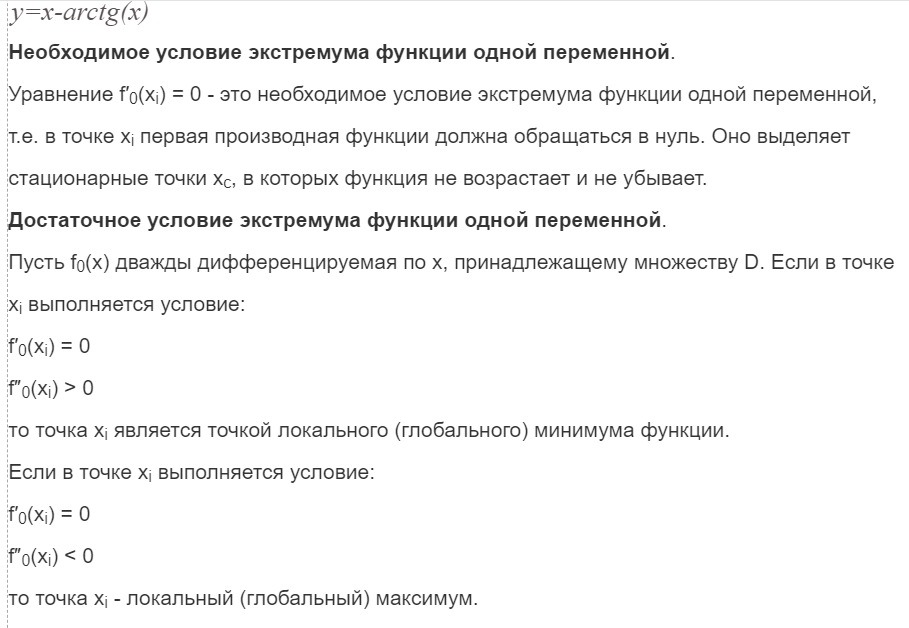
****

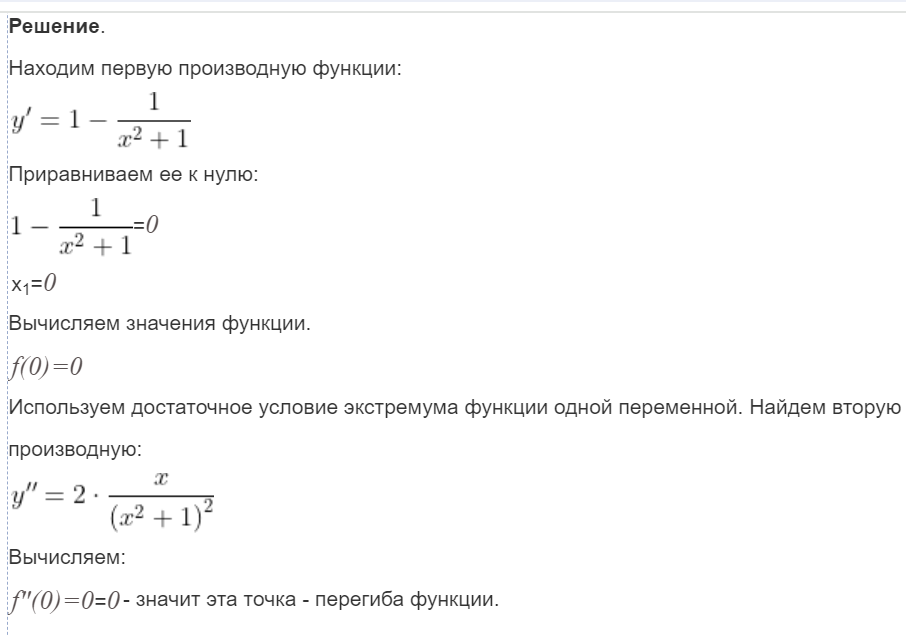
**2.2.**

****

****

**2.3.**

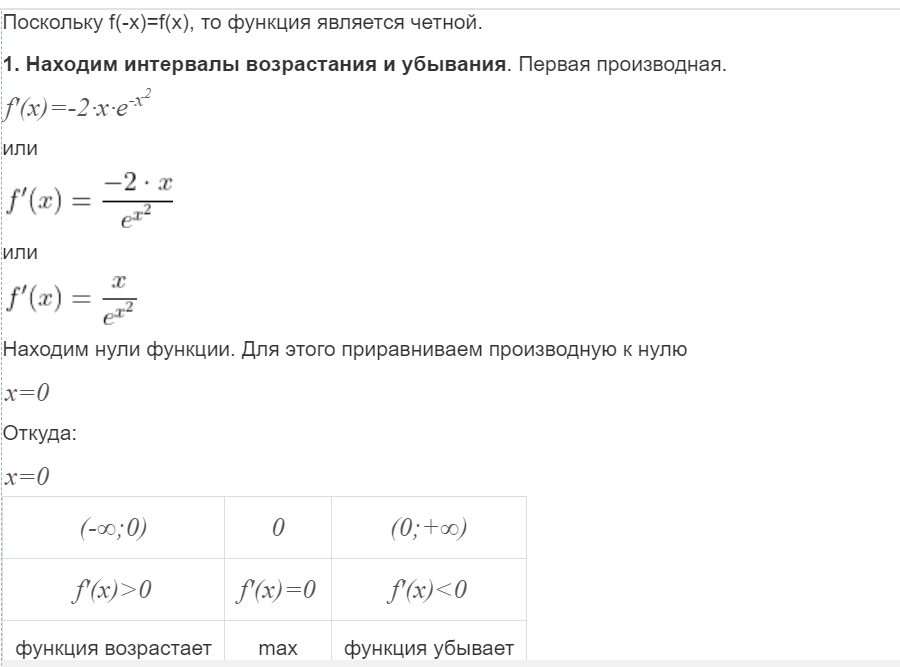
****

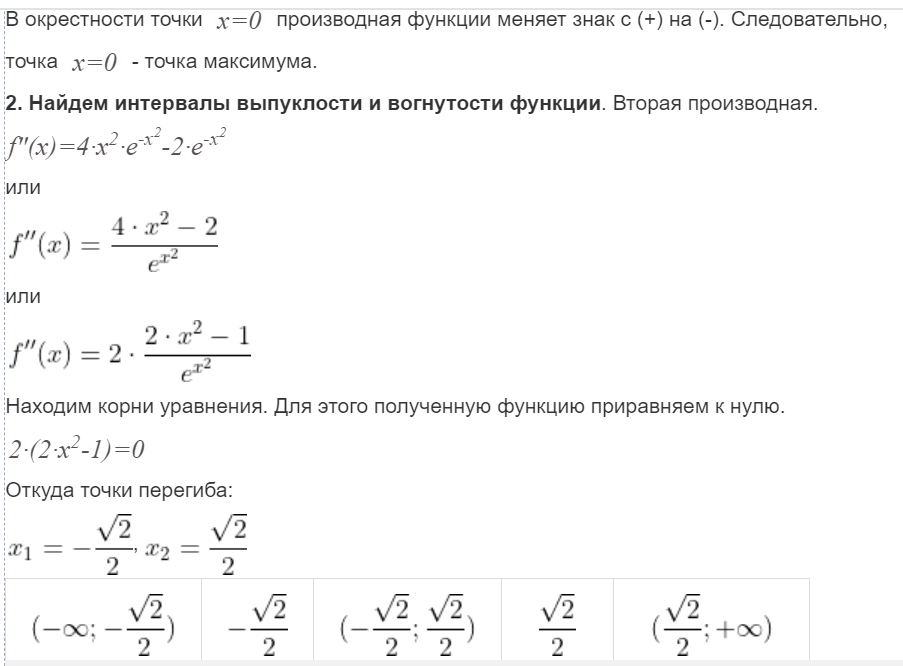
****

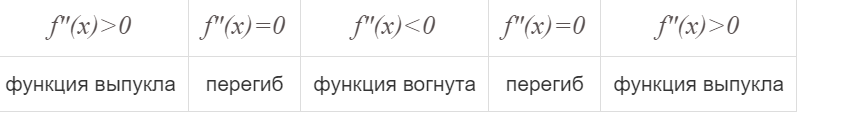
**ЗАДАЧА 3. Найти интервалы выпуклости и точки перегиба функций:**

**3.1.**

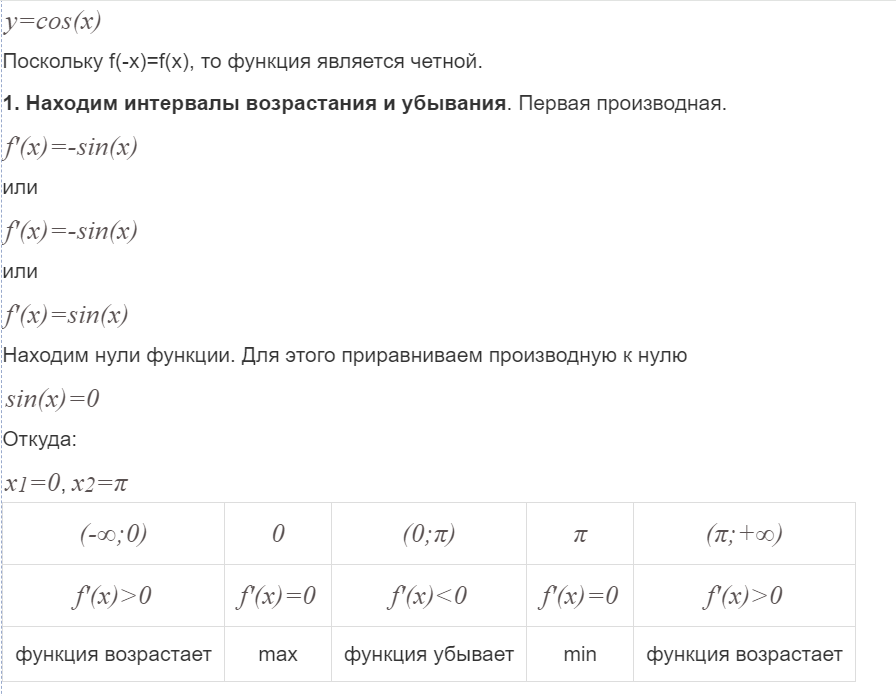
f(x) = e−x2

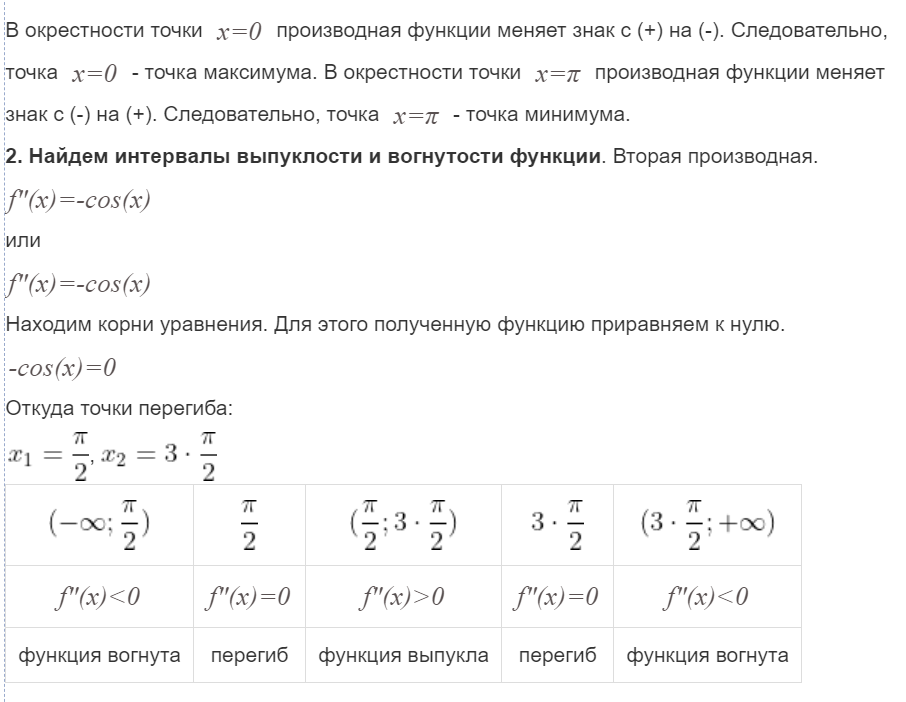
****

****

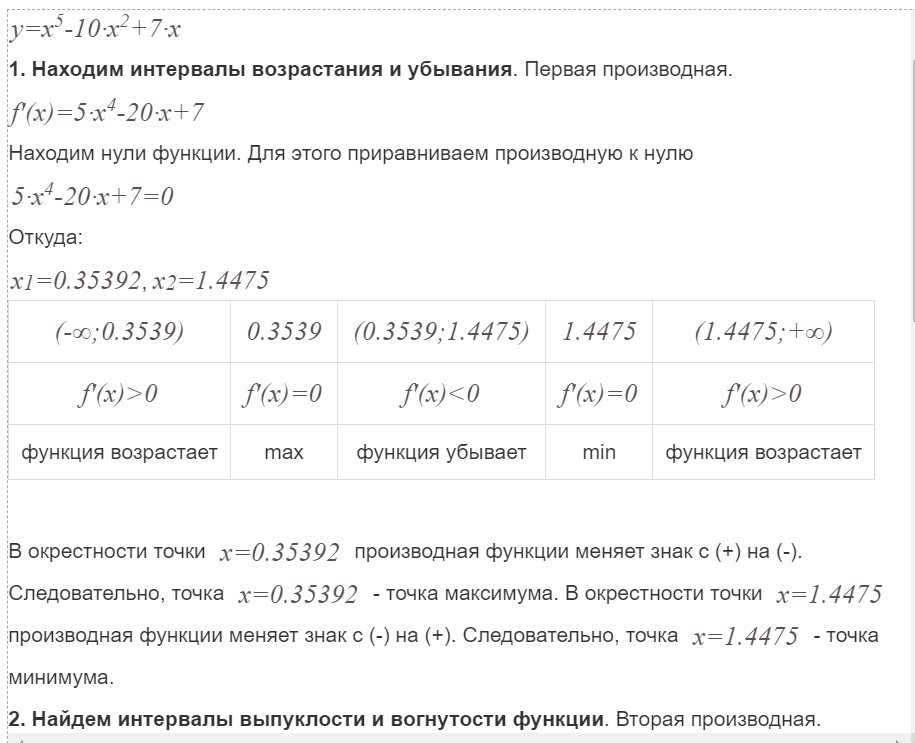
****

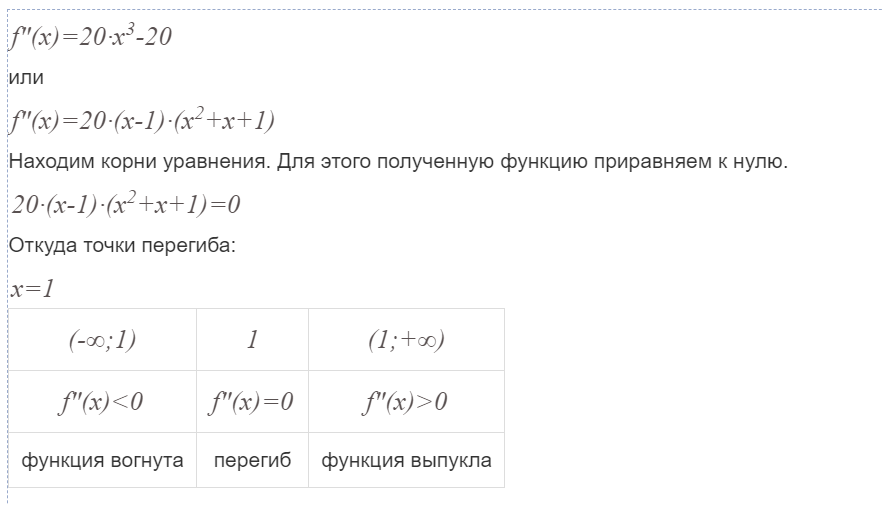
**3.2.**

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****

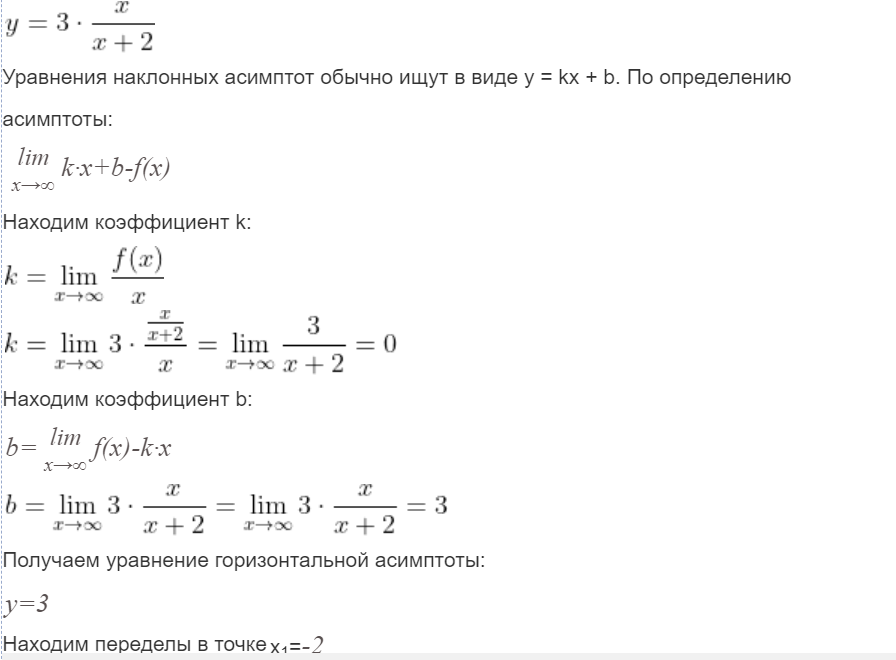
**3.3.**

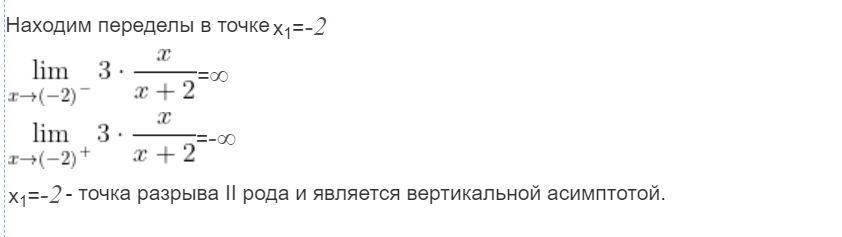
****

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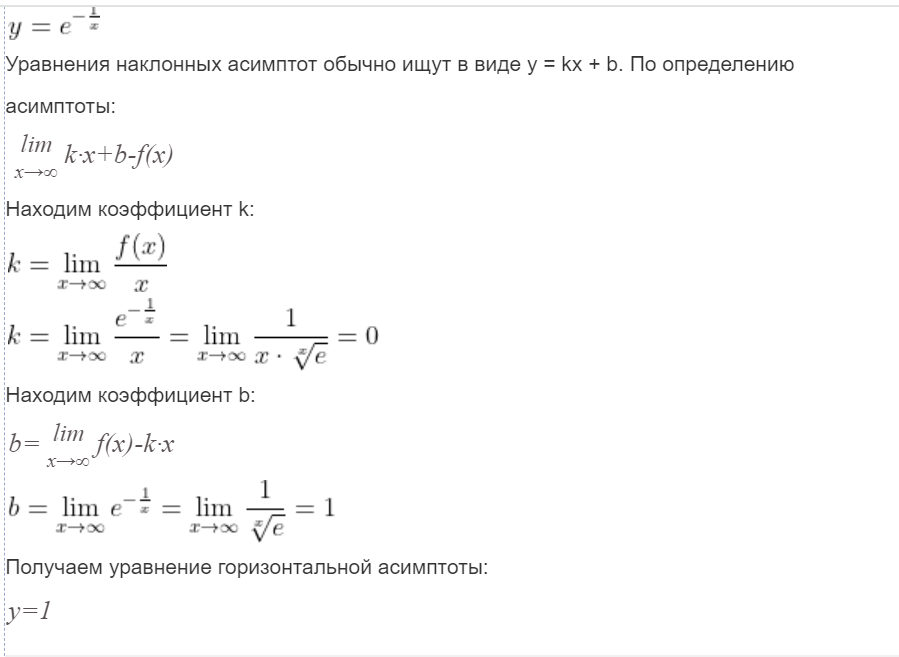
**ЗАДАЧА 4 Найти асимптоты графиков функций:**

**4.1.**

****

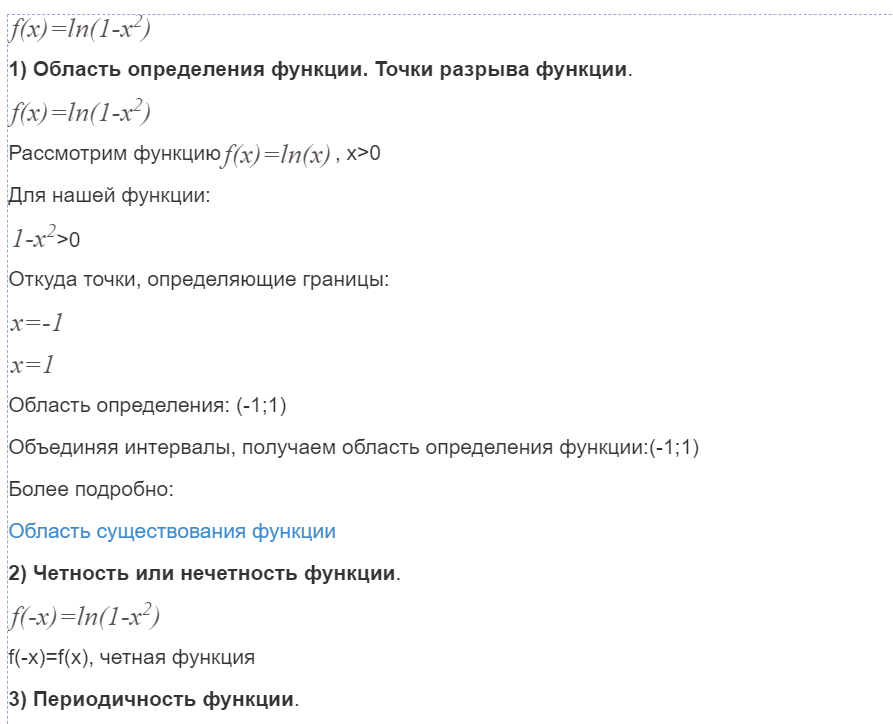
****

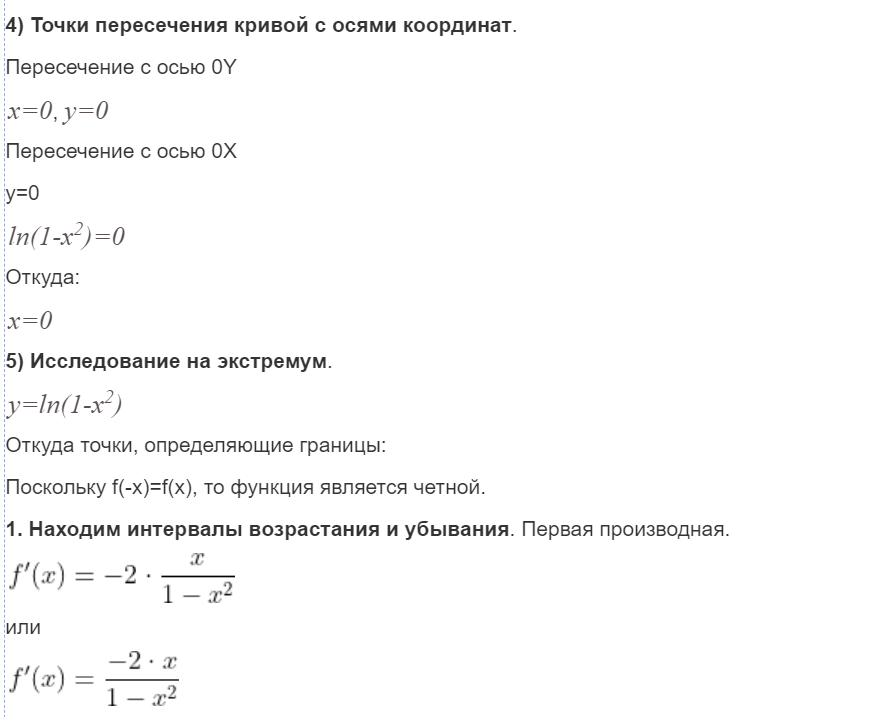
**4.2.**

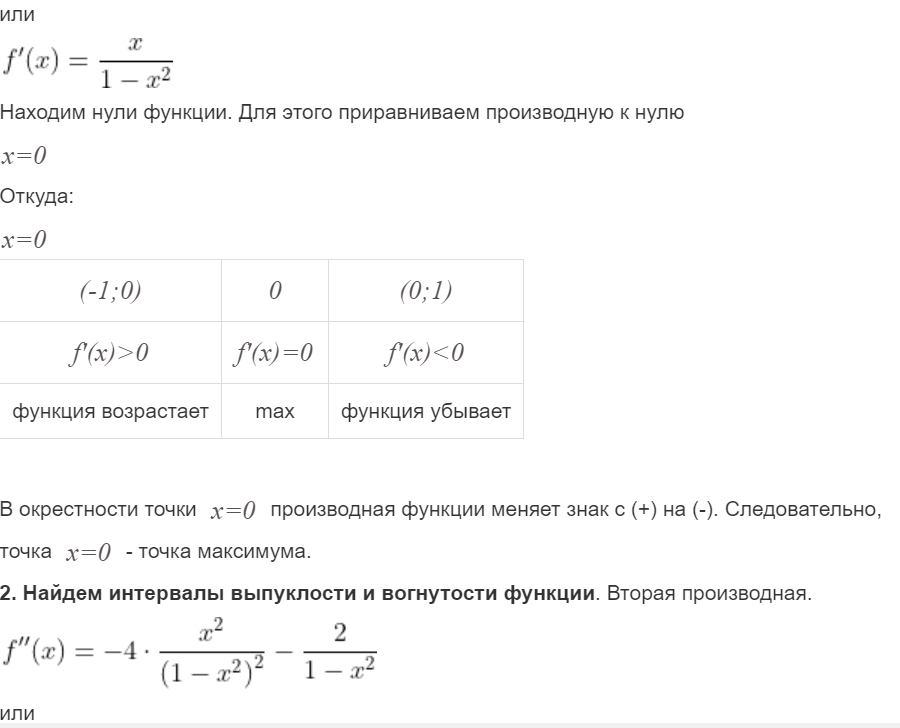
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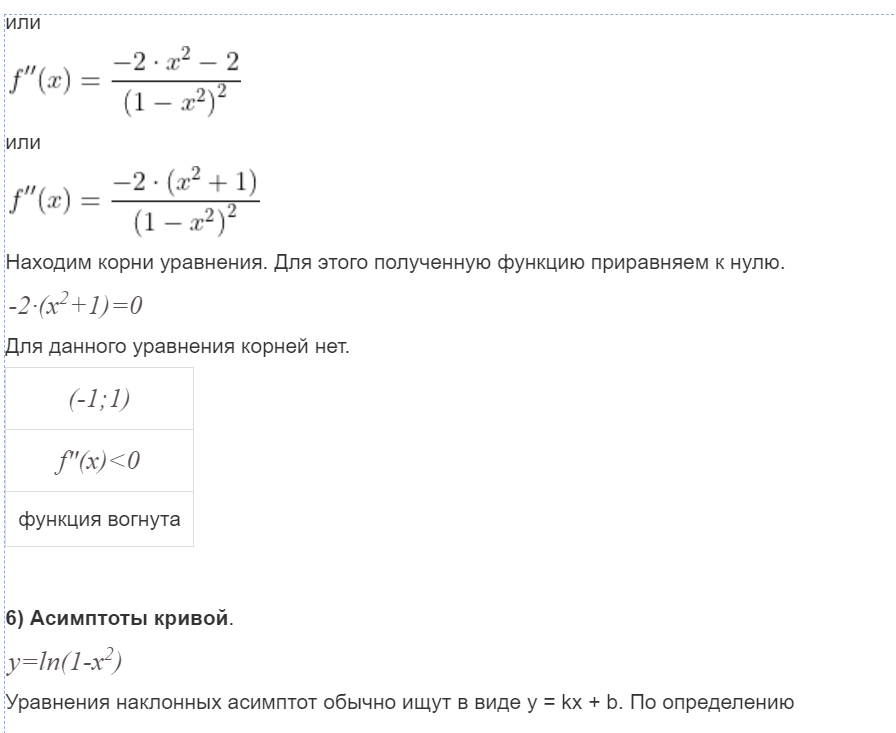
**ЗАДАЧА 5 Провести полное исследование и построить графики функций:**

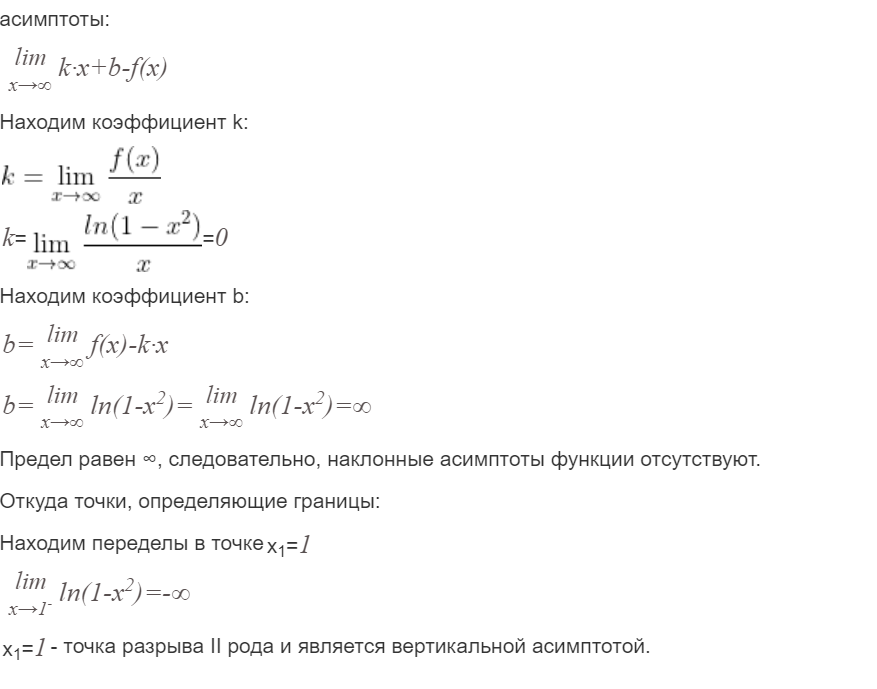
**5.1.**

****

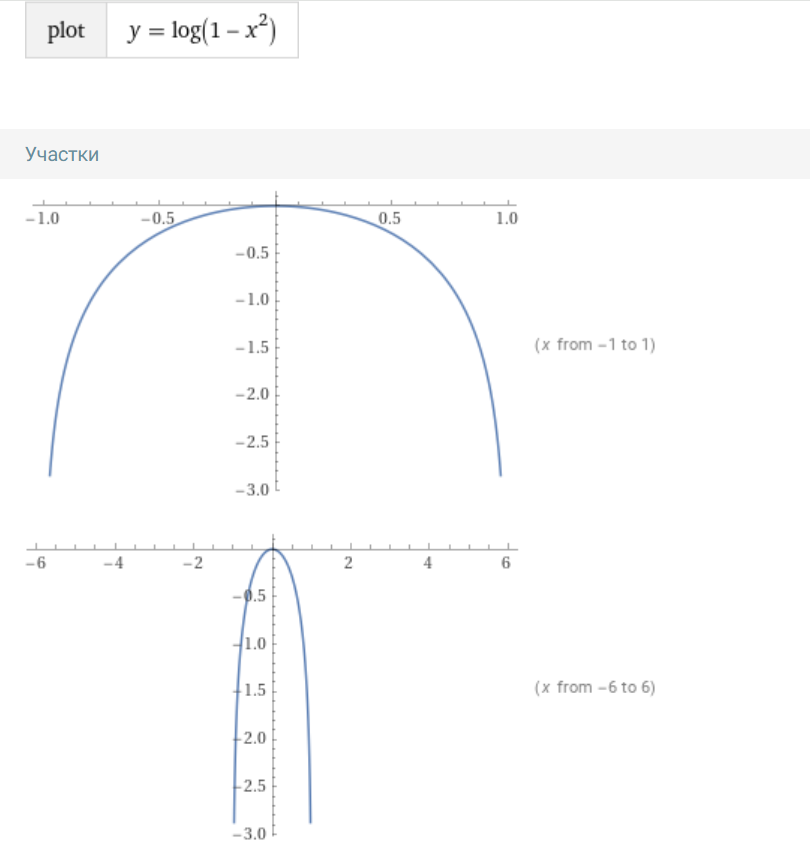
****

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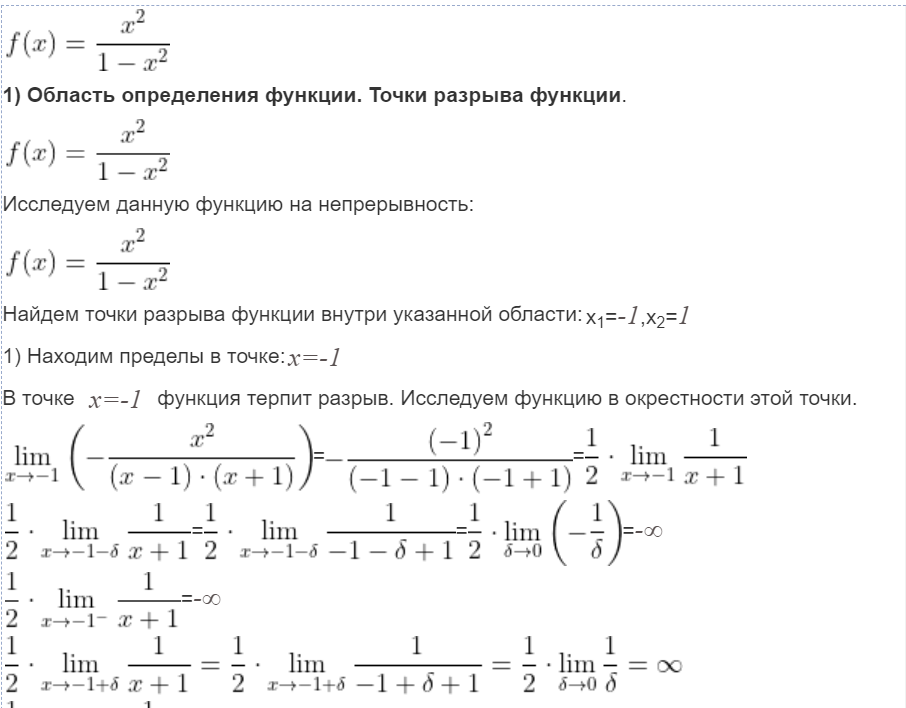
****

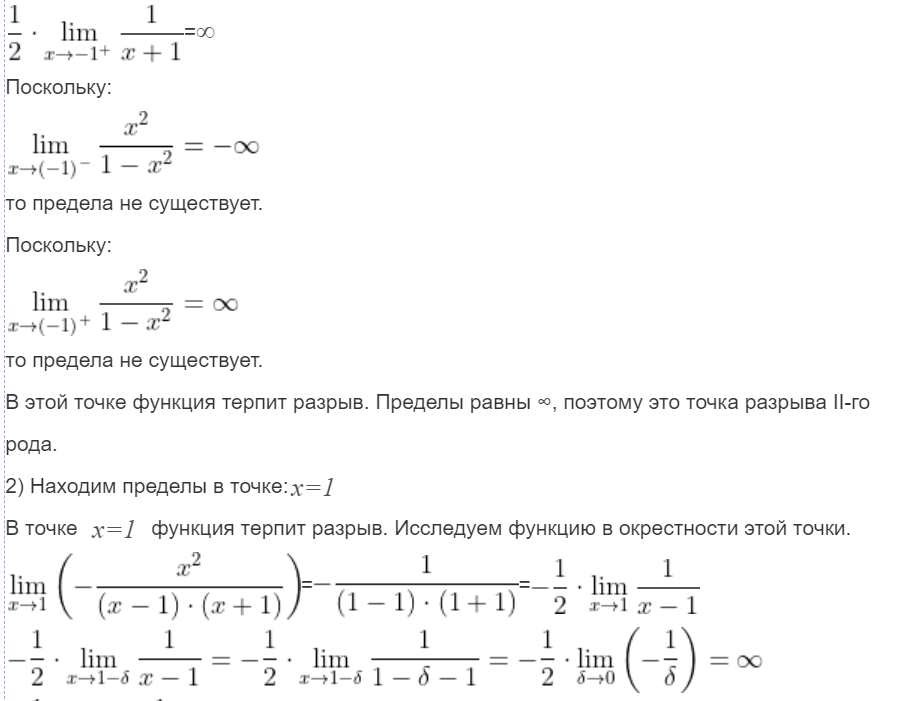
****

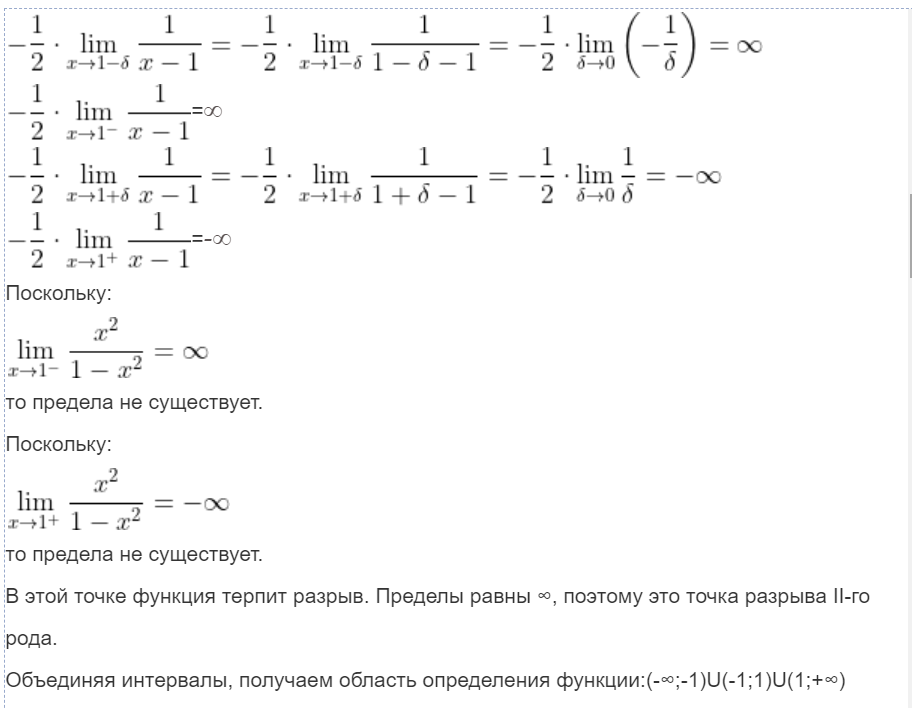
**ГРАФИК:**

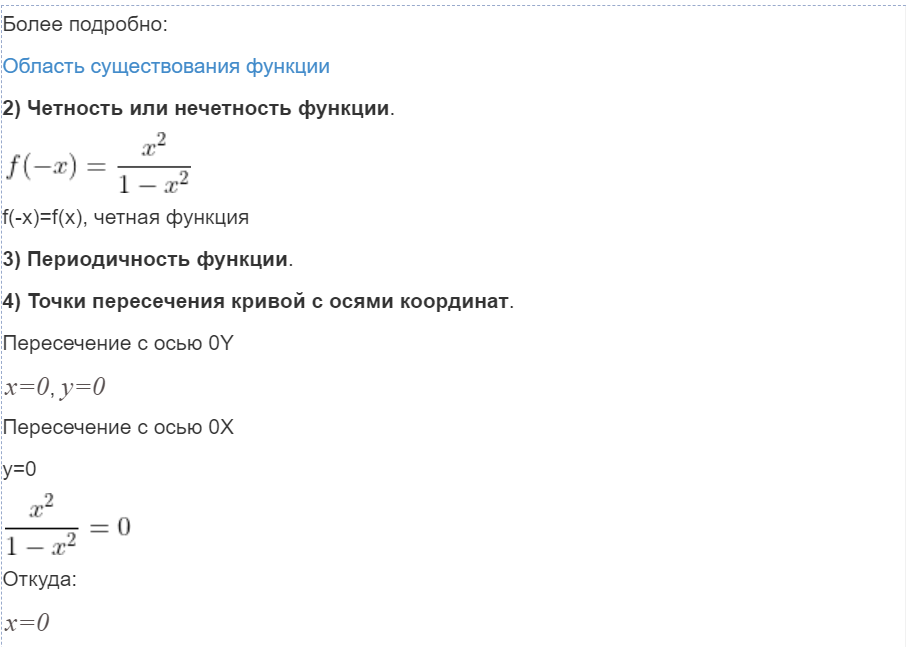
****

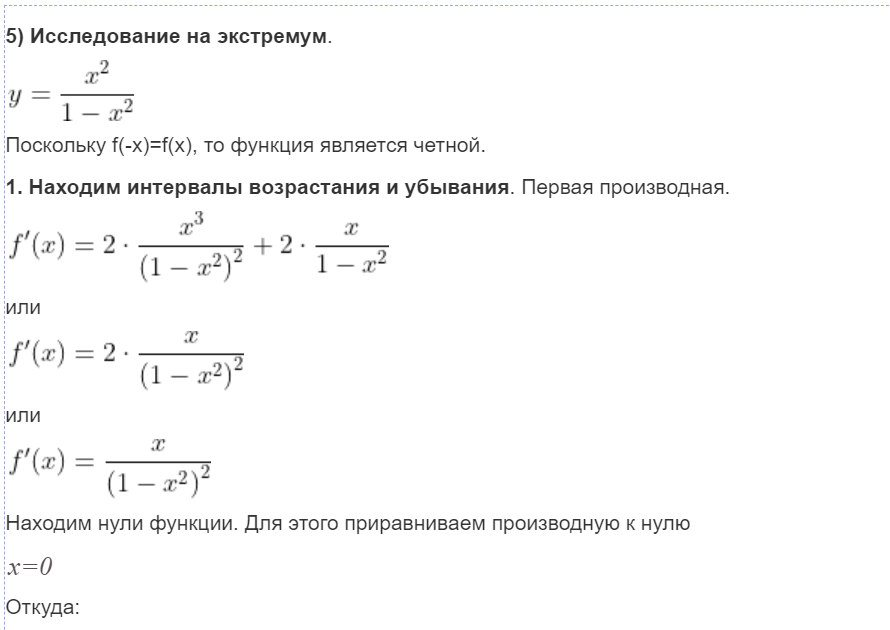
**5.2.**

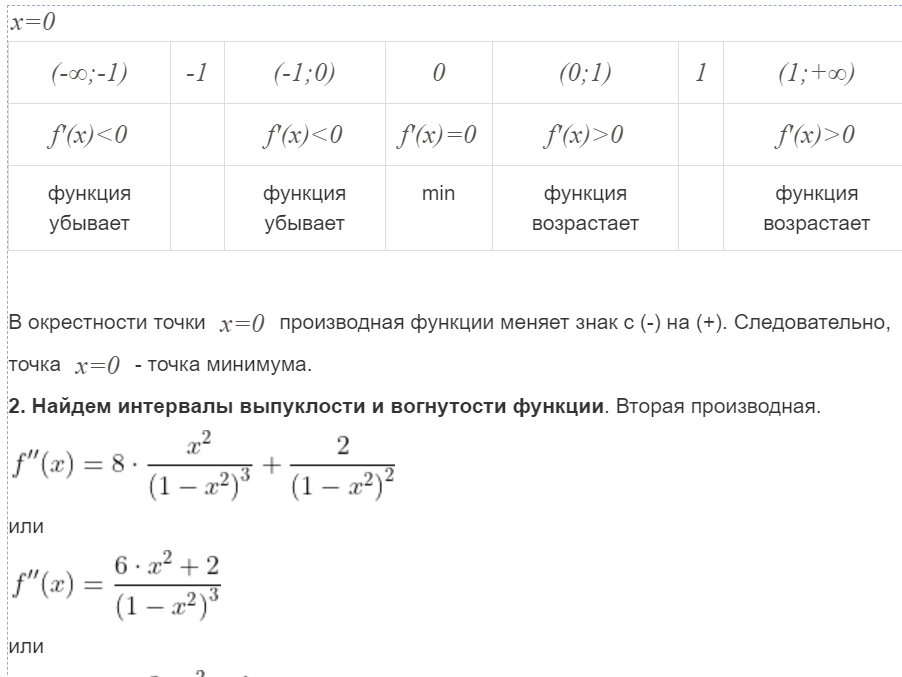
****

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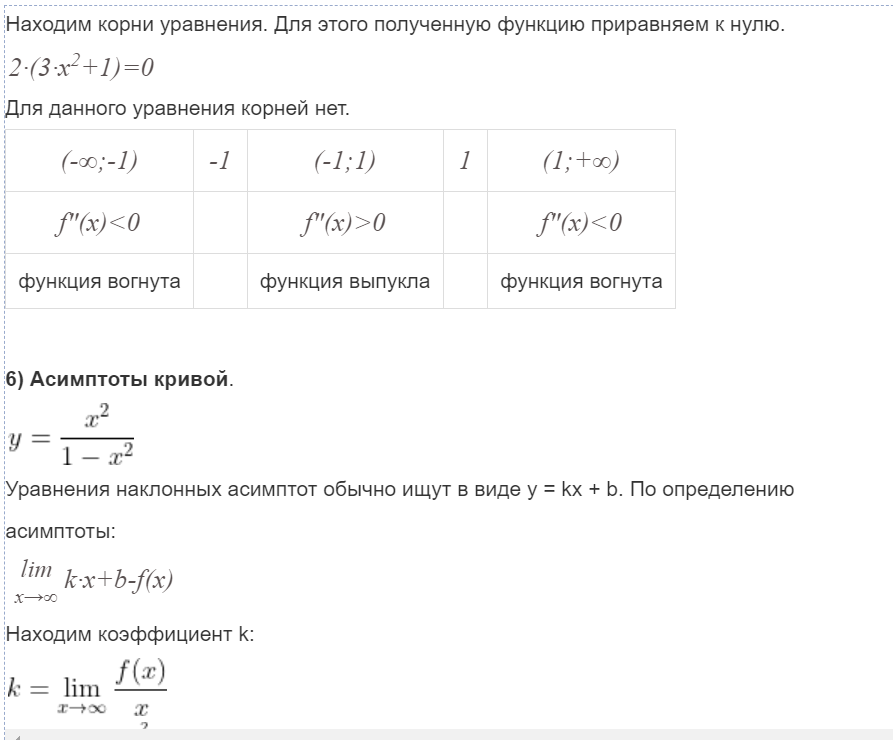
****

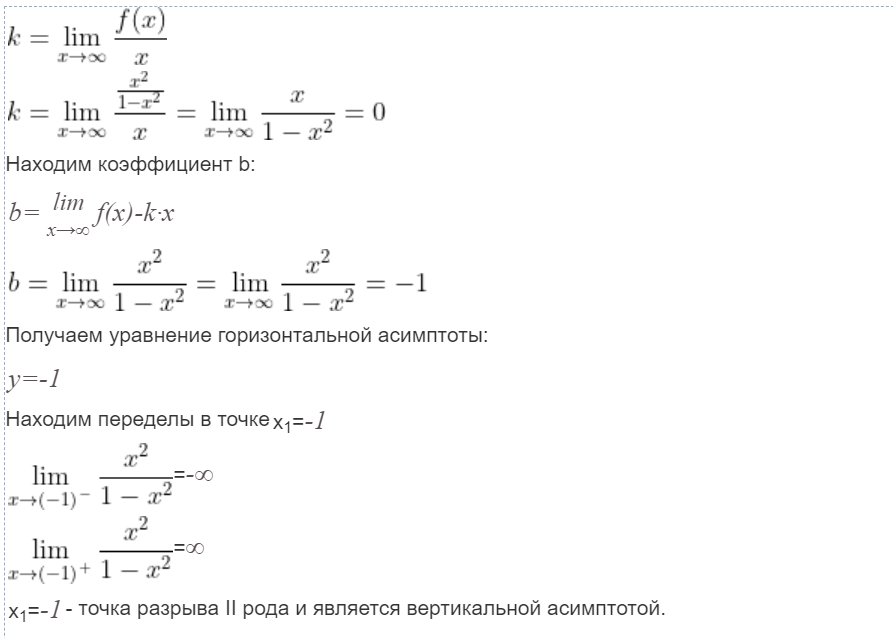
****

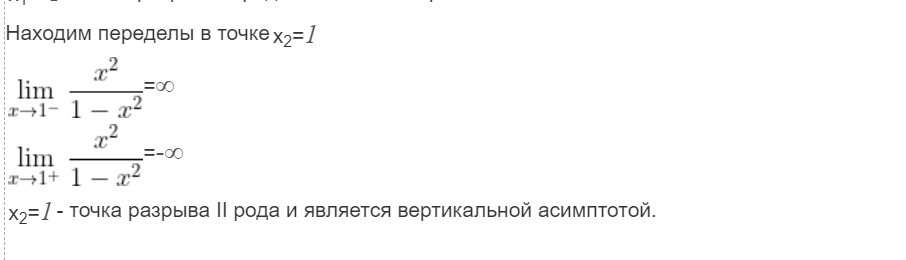
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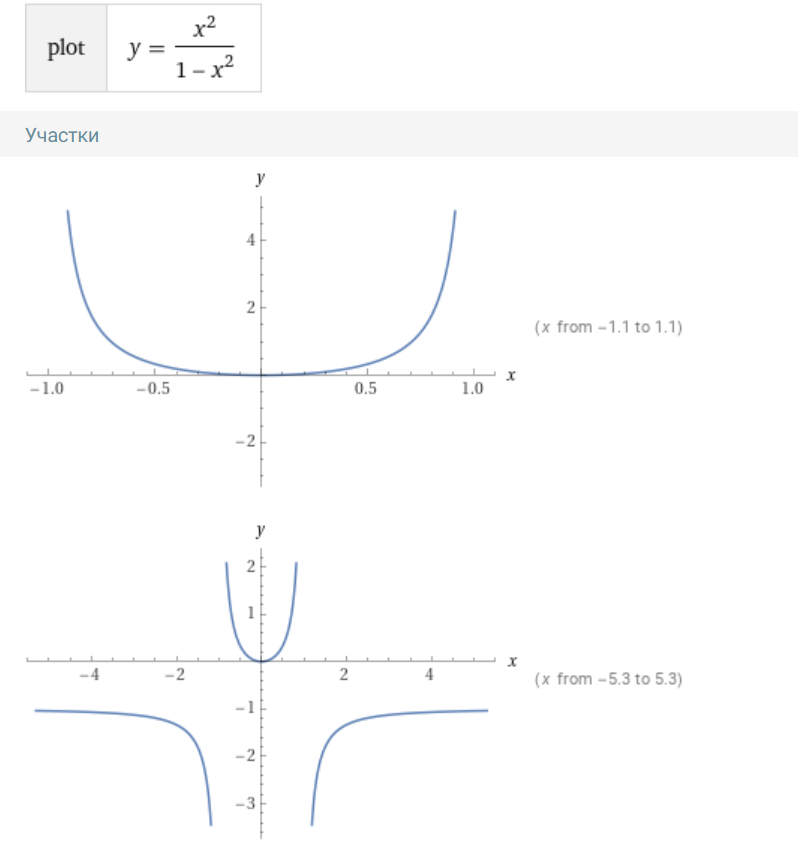
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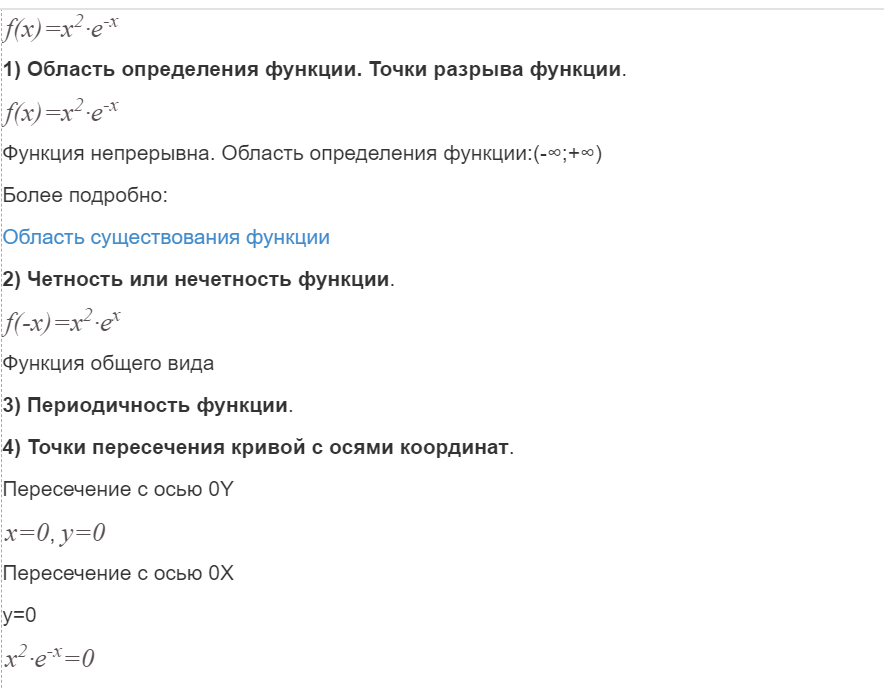
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**ГРАФИК:**

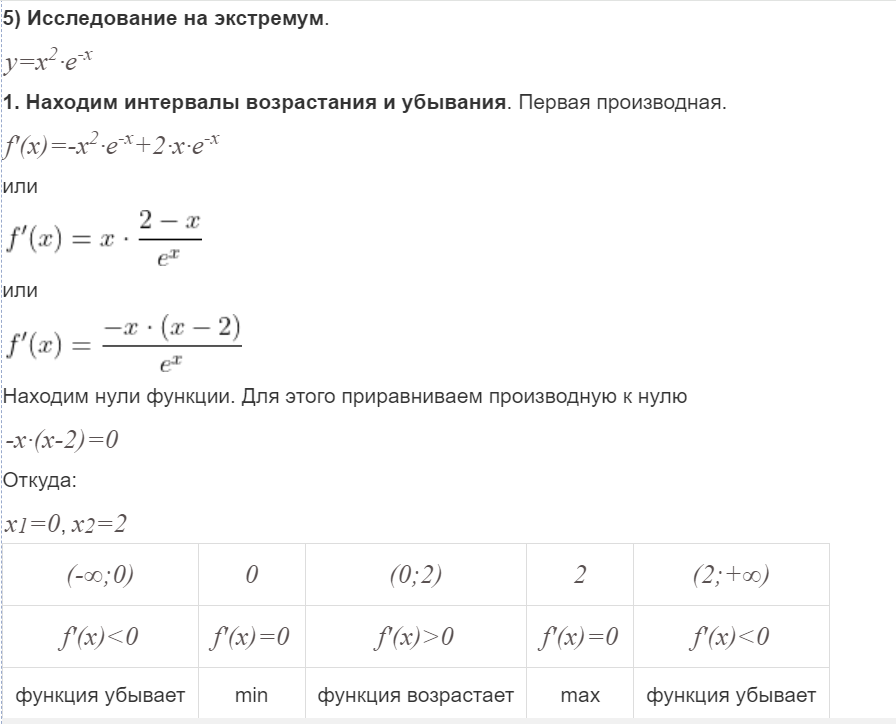
****

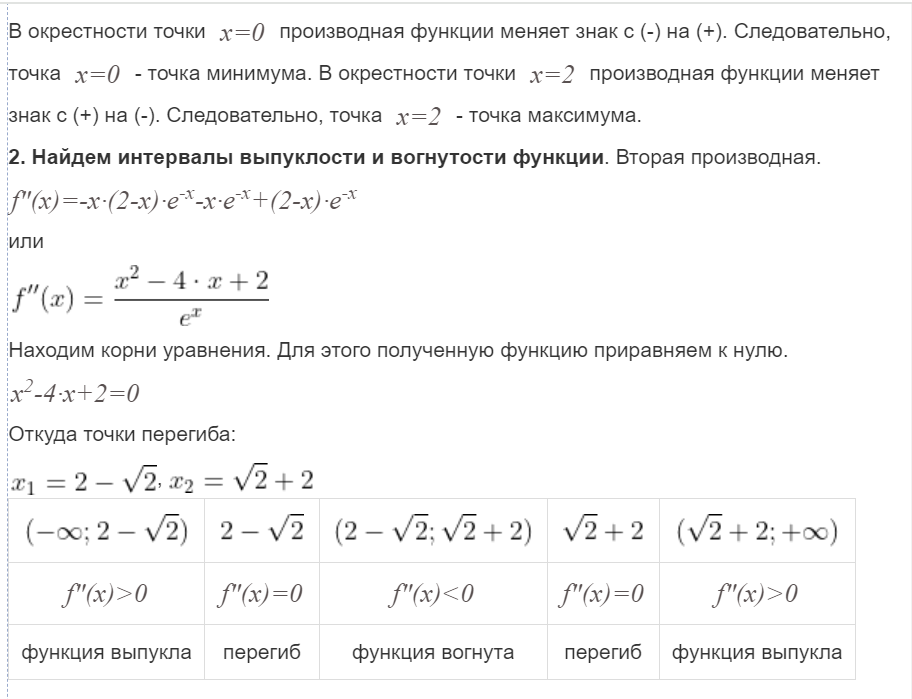
**5.3.**

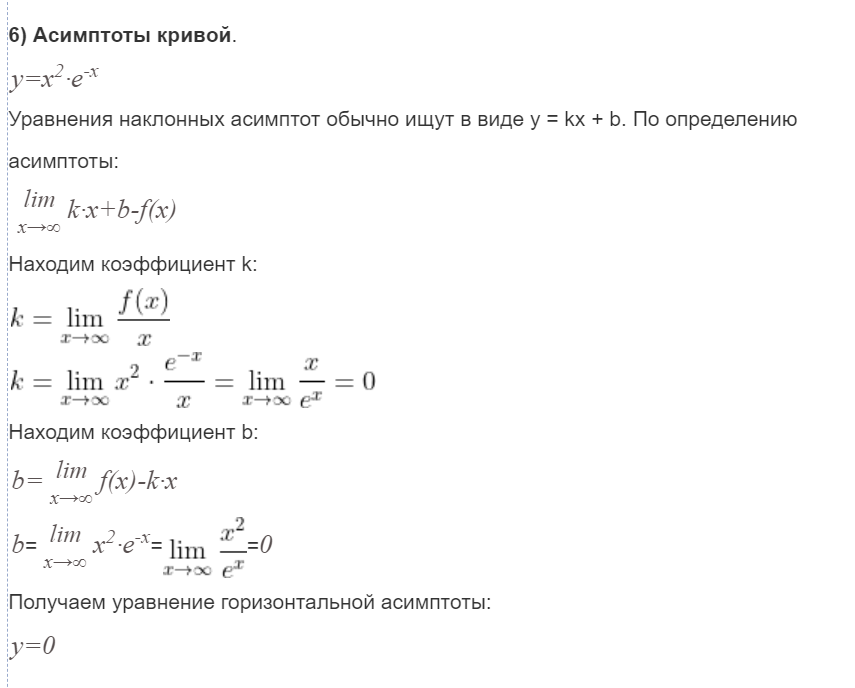
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откуда

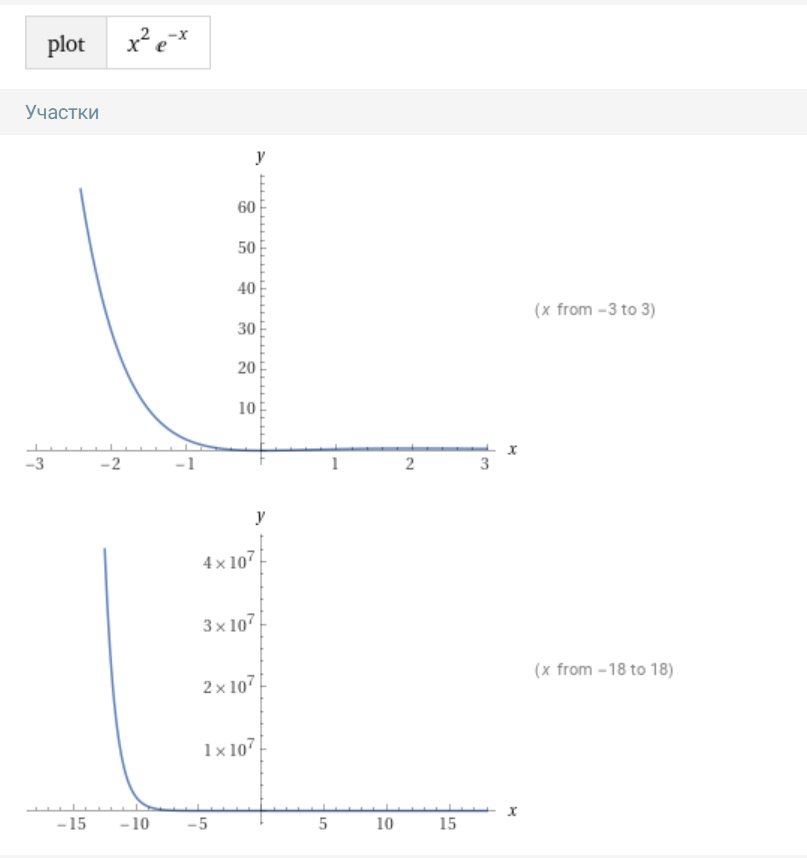
х = 0

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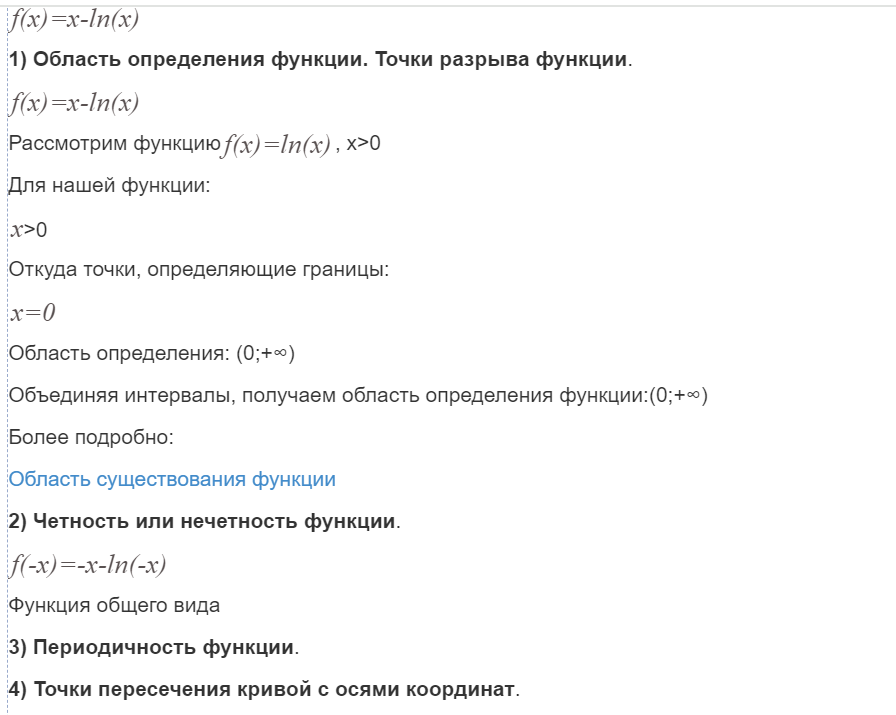
****

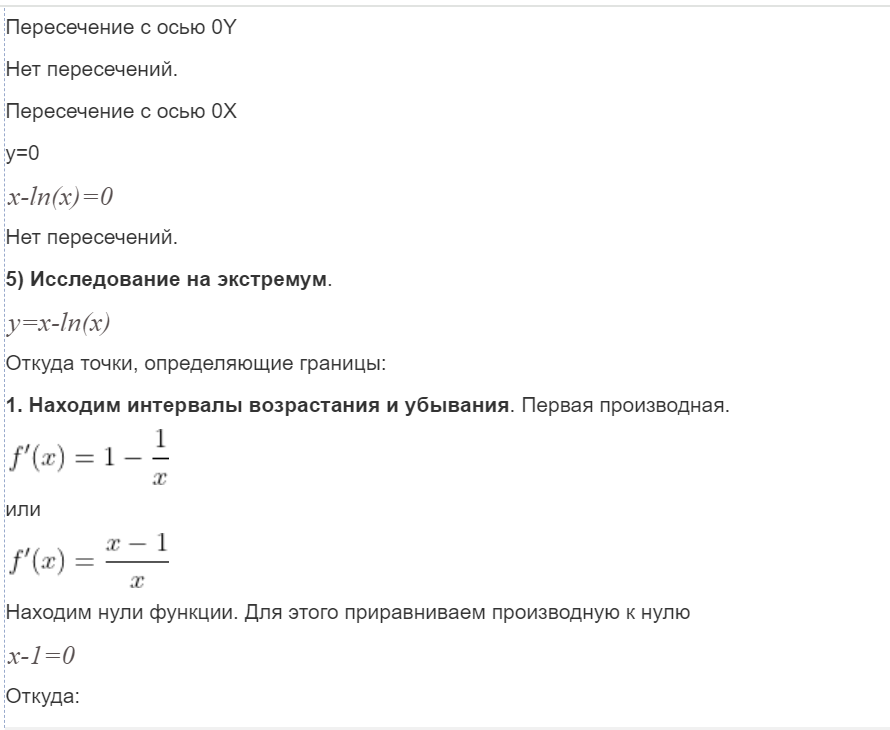
****

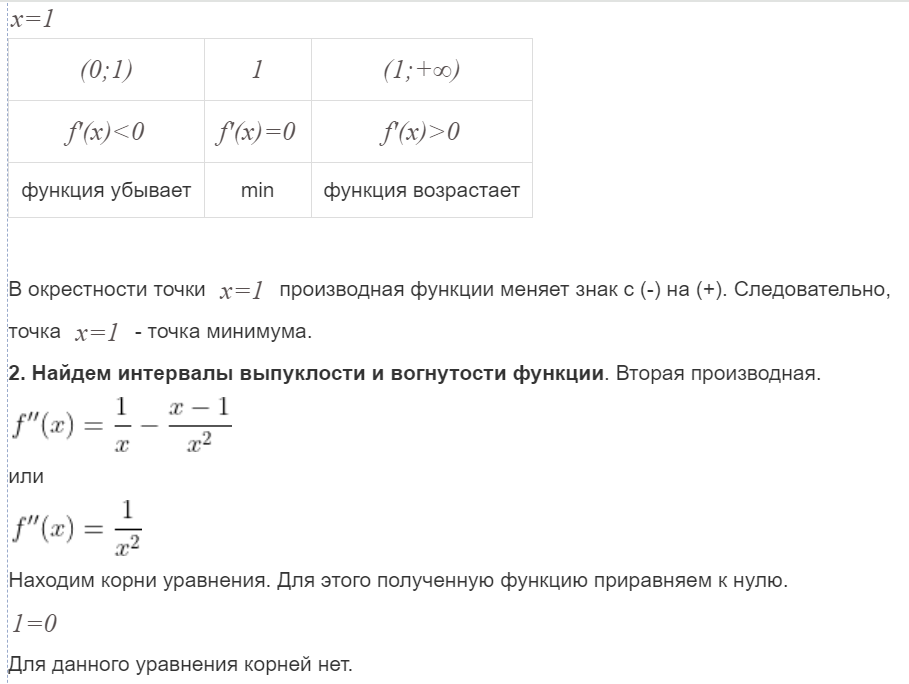
**ГРАФИК:**

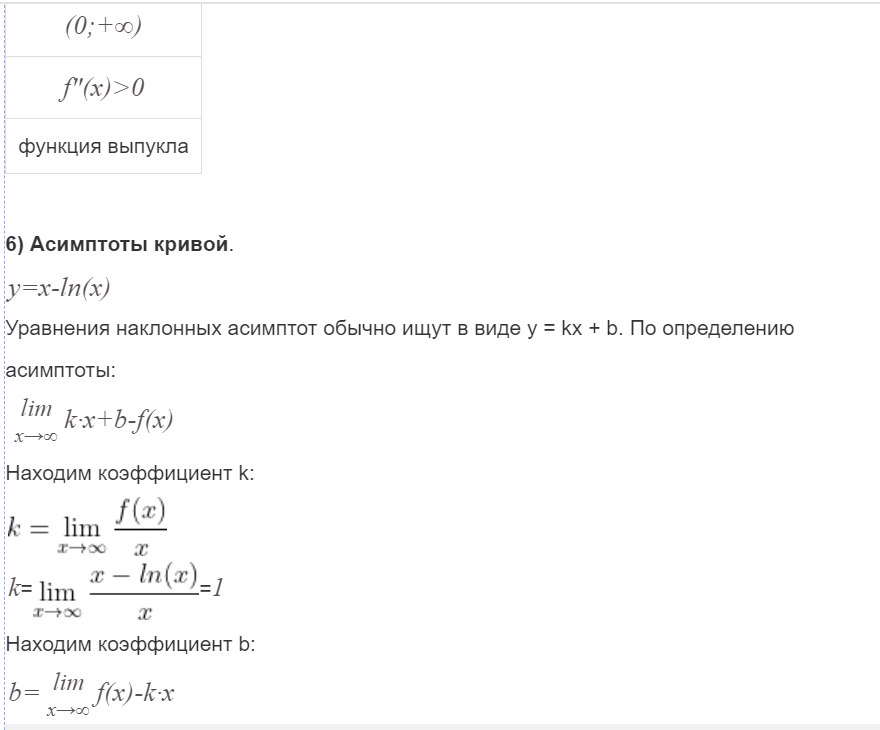
****

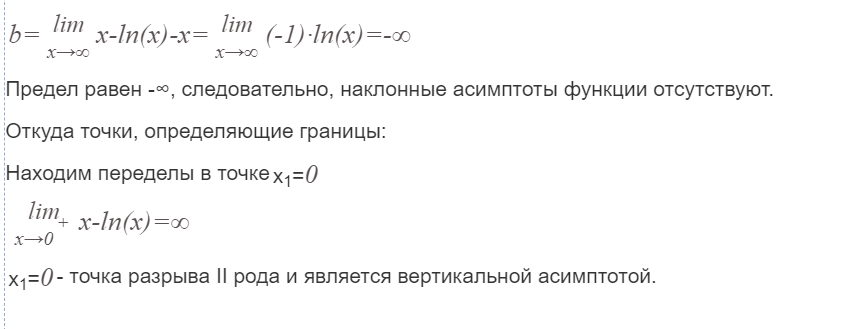
**5.4.**

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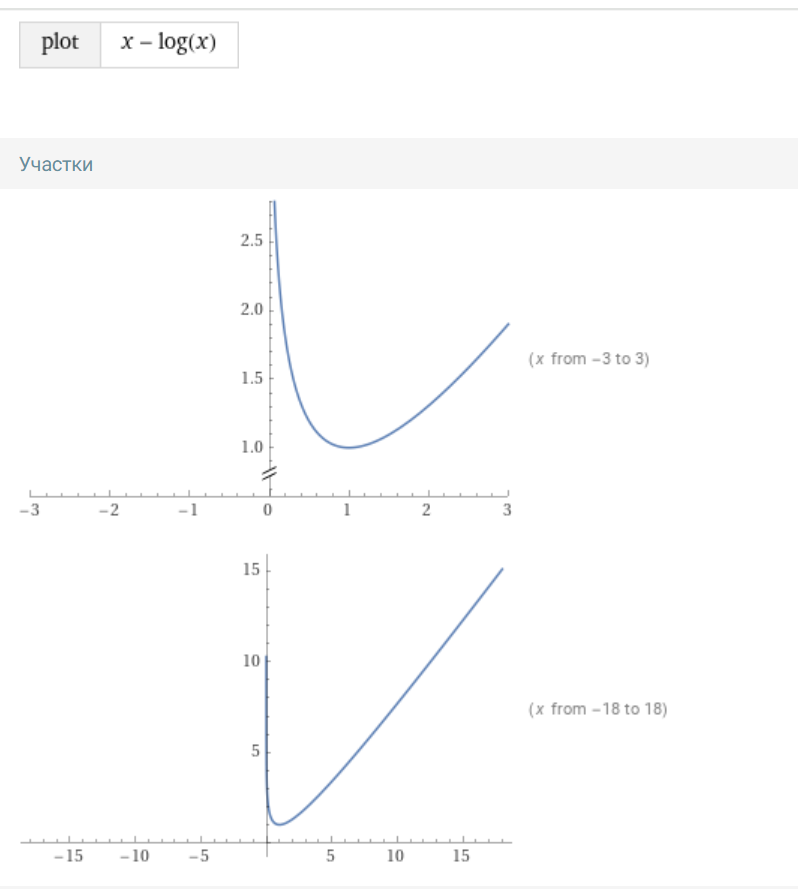
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**ГРАФИК:**

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**СПАСИБО ЗА В Н И М А Н И Е!**