**ПРИЛОЖЕНИЕ A**

**Решение задачи на ЭВМ с помощью программы Simplex**

**Целевая функция:**

**4.000\*x1+5.000\*x2->min**

**Ограничения:**

**0.100\*x1+0.100\*x2<=2.000**

**0.100\*x1+0.300\*x2>=3.000**

**0.800\*x1+0.600\*x2>=7.200**

**0.800\*x1+0.600\*x2<=12.800**

**Таблицы первой фазы:**

**Таблица № 1 :**

**+-----+--------+--------+--------+-------+-------+**

**| min | b | x 1 | x 2 | s 4 | s 5 |**

**+-----+--------+--------+--------+-------+-------+**

**| L | 10.200 | -0.900 | -0.900 | 1.000 | 1.000 |**

**+-----+--------+--------+--------+-------+-------+**

**| s 3 | 2.000 | -0.100 | -0.100 | 0.000 | 0.000 |**

**+-----+--------+--------+--------+-------+-------+**

**| f 7 | 3.000 | -0.100 | -0.300 | 1.000 | 0.000 |**

**+-----+--------+--------+--------+-------+-------+**

**| f 8 | 7.200 | -0.800 | -0.600 | 0.000 | 1.000 |**

**+-----+--------+--------+--------+-------+-------+**

**| s 6 | 12.800 | -0.800 | -0.600 | 0.000 | 0.000 |**

**+-----+--------+--------+--------+-------+-------+**

**Таблица № 2 :**

**+-----+-------+--------+-------+--------+**

**| min | b | x 2 | s 4 | s 5 |**

**+-----+-------+--------+-------+--------+**

**| L | 2.100 | -0.225 | 1.000 | -0.125 |**

**+-----+-------+--------+-------+--------+**

**| s 3 | 1.100 | -0.025 | 0.000 | -0.125 |**

**+-----+-------+--------+-------+--------+**

**| f 7 | 2.100 | -0.225 | 1.000 | -0.125 |**

**+-----+-------+--------+-------+--------+**

**| x 1 | 9.000 | -0.750 | 0.000 | 1.250 |**

**+-----+-------+--------+-------+--------+**

**| s 6 | 5.600 | 0.000 | 0.000 | -1.000 |**

**+-----+-------+--------+-------+--------+**

**Таблица № 3 :**

**+-----+-------+--------+--------+**

**| min | b | s 4 | s 5 |**

**+-----+-------+--------+--------+**

**| L | 0.000 | 0.000 | 0.000 |**

**+-----+-------+--------+--------+**

**| s 3 | 0.867 | -0.111 | -0.111 |**

**+-----+-------+--------+--------+**

**| x 2 | 9.333 | 4.444 | -0.556 |**

**+-----+-------+--------+--------+**

**| x 1 | 2.000 | -3.333 | 1.667 |**

**+-----+-------+--------+--------+**

**| s 6 | 5.600 | 0.000 | -1.000 |**

**+-----+-------+--------+--------+**

**Таблицы второй фазы:**

**Таблица № 1 :**

**+-----+--------+--------+--------+**

**| min | b | s 4 | s 5 |**

**+-----+--------+--------+--------+**

**| L | 54.667 | 8.889 | 3.889 |**

**+-----+--------+--------+--------+**

**| s 3 | 0.867 | -0.111 | -0.111 |**

**+-----+--------+--------+--------+**

**| x 2 | 9.333 | 4.444 | -0.556 |**

**+-----+--------+--------+--------+**

**| x 1 | 2.000 | -3.333 | 1.667 |**

**+-----+--------+--------+--------+**

**| s 6 | 5.600 | 0.000 | -1.000 |**

**+-----+--------+--------+--------+**

**Решение:**

**x1=2.000**

**x2=9.333**