F(x1,x2) = (3+2t)x1 + (6-5t)x2, t e [-1;1]

6x1 + 6x2 <= 36

3x1 + 7x2 <= 21

5x1 + 2x2 >= 10

x1>=0, x2>=0

6x1 + 6x2 + 1x3 + 0x4 + 0x5 = 36

3x1 + 7x2 + 0x­3 + 1x4 + 0x5 = 21

5x1 + 2x2 + 0x­3 + 0x4 - 1x5 + 1x6 = 10

x1>=0, x2>=0

t=-1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Сj | 3 + 2t | 6 – 5t | 0 | 0 | 0 | -M |
| Базис | Cб | A0 | A1 | A2 | A3 | A4 | A5 | A6 |
| A3 | 0 | 36 | 6 | 6 | 1 | 0 | 0 | 0 |
| A4 | 0 | 21 | 3 | 7 | 0 | 1 | 0 | 0 |
| A6 | -M | 10 | 5 | 2 | 0 | 0 | -1 | 1 |
| m+1 | δj | -10M | -5M-3 | -2M-6 | 0 | 0 | M | 0 |
| m+2 | pj | 0 | -2 | 5 | 0 | 0 | 0 | 0 |
| m+3 | δ’j | -10M | -5M-1 | -2M-11 | 0 | 0 | M | 0 |

^ Min(-5M-1) = A1

< min(36/6; 21/3; 10/5) =min{6,7,2) = A6

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Сj | 3 + 2t | 6 – 5t | 0 | 0 | 0 |
| Базис | Cб | A0 | A1 | A2 | A3 | A4 | A5 |
| A3 | 0 | 24 | 0 | 18/5 | 1 | 0 | 6/5 |
| A4 | 0 | 15 | 0 | 29/5 | 0 | 0 | -2/5 |
| A1 | 3 + 2t | 2 | 1 | 2/5 | 0 | 0 | -1/5 |
| m+1 | δj | 6 | 0 | -24/5 | 0 | 0 | -3/5 |
| m+2 | pj | 4 | 0 | -21/5 | 0 | 0 | -2/5 |
| m+3 | δ’j | 2 | 0 | -3/5 | 0 | 0 | -1/5 |

^ Min(-3/5) = A2

< min(20/3; 75/29; 10/2) =min{75/29) = A4

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Сj | 3 + 2t | 6 – 5t | 0 | 0 | 0 |
| Базис | Cб | A0 | A1 | A2 | A3 | A4 | A5 |
| A3 | 0 | 426/29 | 0 | 0 | 1 | 0 | 42/29 |
| A2 | 6 – 5t | 75/29 | 0 | 1 | 0 | 0 | -2/29 |
| A1 | 3 + 2t | 18/29 | 1 | 0 | 0 | 0 | -5/29 |
| m+1 | δj | 504/29 | 0 | 0 | 0 | 0 | -27/29 |
| m+2 | pj | -339/29 | 0 | 0 | 0 | 0 | -20/29 |
| m+3 | δ’j | 843/29 | 0 | 0 | 0 | 0 | -47/29 |

^ Min= A5

< min = A3

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Сj | 3 + 2t | 6 – 5t | 0 | 0 | 0 |
| Базис | Cб | A0 | A1 | A2 | A3 | A4 | A5 |
| A5 | 0 | 426/42 | 0 | 0 | 29/42 | 0 | 1 |
| A2 | 6 – 5t | 23/7=667/203 | 0 | 1 | 2/42 | 0 | 0 |
| A1 | 3 + 2t | 229/203 | 1 | 0 | 5/42 | 0 | 0 |
| m+1 | δj | 4689/203 | 0 | 0 | 27/42 | 0 | 0 |
| m+2 | pj | -2877/203 | 0 | 0 | 0 | 0 | 0 |
| m+3 | δ’j | 7566/203 | 0 | 0 | 27/42 | 0 | 0 |

Opt(229/203;667/203,t) = (3+2t) 229/203 + (6-5t) 667/203 = 7566/203

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Сj | 3 + 2t | 6 – 5t | 0 | 0 | 0 |
| Базис | Cб | A0 | A1 | A2 | A3 | A4 | A5 |
| A3 | 0 |  |  |  |  |  |  |
| A4 | 0 |  |  |  |  |  |  |
| A6 | -M |  |  |  |  |  |  |
| m+1 | δj |  |  |  |  |  |  |
| m+2 | pj |  |  |  |  |  |  |
| m+3 | δ’j |  |  |  |  |  |  |