|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 6 | 14 | 13 | 0 | 0 |  |
|  |  | b |  |  |  |  |  | θ |
| 0 |  | 48 | 1 | 4 | 2 | 1 | 0 | 12 |
| 0 |  | 60 | 1 | 2 | 4 | 0 | 1 | 30 |
| -z | | 0 | 6 | 14 | 13 | 0 | 0 |  |

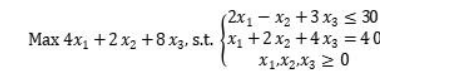
|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 6 | 14 | 13 | 0 | 0 |  |
|  |  | b |  |  |  |  |  | θ |
| 14 |  | 12 | 1/4 | 1 | 1/2 | 1/4 | 0 | 24 |
| 0 |  | 36 | 1/2 | 0 | 3 | -1/2 | 1 | 12 |
| -z | | -168 | 5/2 | 0 | 6 | -7/2 | 0 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 6 | 14 | 13 | 0 | 0 |  |
|  |  | b |  |  |  |  |  | θ |
| 14 |  | 6 | 1/6 | 1 | 0 | 1/3 | -1/6 | 36 |
| 13 |  | 12 | 1/6 | 0 | 1 | -1/6 | 1/3 | 72 |
| -z | | -240 | 3/2 | 0 | 0 | -5/2 | -13/3 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 6 | 14 | 13 | 0 | 0 |  |
|  |  | b |  |  |  |  |  | θ |
| 6 |  | 36 | 1 | 6 | 0 | 2 | -1 |  |
| 13 |  | 6 | 0 | -1 | 1 | -1/2 | 1/2 |  |
| -z | | -294 | 0 | -9 | 0 | -11/2 | -1/2 |  |

最优解（36,0,6,0,0） z = 294

10.大M法



|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 4 | 2 | 8 | 0 | -M |  |
|  |  | b |  |  |  |  |  | θ |
| 0 |  | 30 | 2 | -1 | 3 | 1 | 0 | 10 |
| -M |  | 40 | 1 | 2 | 4 | 0 | 1 | 10 |
| -z | | 40M | 4+M | 2+2M | 8+4M | 0 | 0 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 4 | 2 | 8 | 0 | -M |  |
|  |  | b |  |  |  |  |  | θ |
| 0 |  | 0 | 5/4 | -5/2 | 0 | 1 | -3/4 | 0 |
| 8 |  | 10 | 1/4 | 1/2 | 1 | 0 | 1/4 | 40 |
| -z | | -80 | 2 | -2 | 0 | 0 | -M-2 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 4 | 2 | 8 | 0 | -M |  |
|  |  | b |  |  |  |  |  | θ |
| 4 |  | 0 | 1 | -2 | 0 | 4/5 | -3/5 | 0 |
| 8 |  | 10 | 0 | 1 | 1 | -1/5 | 2/5 | 10 |
| -z | | -80 | 0 | 2 | 0 | -8/5 | -M-4/5 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 4 | 2 | 8 | 0 | -M |  |
|  |  | b |  |  |  |  |  | θ |
| 4 |  | 20 | 1 | 0 | 2 | 2/5 | 1/5 |  |
| 2 |  | 10 | 0 | 1 | 1 | -1/5 | 2/5 |  |
| -z | | -100 | 0 | 0 | -2 | -6/5 | -M-8/5 |  |

最优解：（20,10,0,0,0） z = 100

两阶段法

Max z = -x5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 0 | 0 | 0 | 0 | -1 |  |
|  |  | b |  |  |  |  |  | θ |
| 0 |  | 30 | 2 | -1 | 3 | 1 | 0 | 10 |
| -1 |  | 40 | 1 | 2 | 4 | 0 | 1 | 10 |
| -z | | 40 | 1 | 2 | 4 | 0 | 0 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 0 | 0 | 0 | 0 | -1 |  |
|  |  | b |  |  |  |  |  | θ |
| 0 |  | 10 | 2/3 | -1/3 | 1 | 1/3 | 0 | - |
| -1 |  | 0 | -5/3 | 10/3 | 0 | -4/3 | 1 | 0 |
| -z | | 0 | -5/3 | 10/3 | 0 | -4/3 | 0 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 0 | 0 | 0 | 0 | -1 |  |
|  |  | b |  |  |  |  |  | θ |
| 0 |  | 10 | 1/2 | 0 | 1 | 1/5 | 1/10 |  |
| 0 |  | 0 | -1/2 | 1 | 0 | -2/5 | 3/10 |  |
| -z | | 0 | 0 | 0 | 0 | 0 | -1 |  |

Max z = 4x1 + 2x2 + 8x3

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | 4 | 2 | 8 | 0 |  |
|  |  | b |  |  |  |  | θ |
| 8 |  | 10 | 1/2 | 0 | 1 | 1/5 | 0 |
| 2 |  | 0 | -1/2 | 1 | 0 | -2/5 | 0 |
| -z | | -80 | 1 | 0 | 0 | -4/5 |  |
|  | | | 4 | 2 | 8 | 0 |  |
|  |  | b |  |  |  |  | θ |
| 4 |  | 20 | 1 | 0 | 2 | 2/5 | 0 |
| 2 |  | 10 | 0 | 1 | 1 | -1/5 | 0 |
| -z | | -100 | 0 | 0 | -2 | -6/5 |  |

最优解：（20,10,0,0,0） z = 100