**Objective Function:** *Max*(*Z*) = 5x + 4y

Subject to:

* 3x + 5y + s1 <= 78
* 4x + y + s2 <= 36
* *X*, *Y* >= 0 (nonnegativity constraint)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *x* | *y* | *s1* | *s2* | *b* |
| 3 | 5 | 1 | 0 | 78 |
| 4 | 1 | 0 | 1 | 36 |
| **-5** | **-4** | **0** | **0** | **0** |