Texto

Descripción generada automáticamente

Agregamos las variables de holgura

X1 + 2 X2 + s1 = 120

X1 + X2 + s2 = 90

X1 + s3 = 70

X2+s4=50

Con x mayor a cero

Con la tabla queda:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | X1 | X2 | S1 | S2 | S3 | S4 | Solución |
| Z | -20 | -10 | 0 | 0 | 0 | 0 | 0 |
| S1 | 1 | 2 | 1 | 0 | 0 | 0 | 120 |
| S2 | 1 | 1 | 0 | 1 | 0 | 0 | 90 |
| S3 | 1 | 0 | 0 | 0 | 1 | 0 | 70 |
| S4 | 0 | 1 | 0 | 0 | 0 | 1 | 50 |

Entra x1 y sale s3

Para Z multiplicamos el renglón pivote por 20 y sumamos Z+x1

Para s1 multiplicamos el renglón pivote por 1 y restamos s1-x1

Para s2 multiplicamos el renglón pivote por 1 y restamos s2-x1

Para s3 multiplicamos el renglón pivote por 1 y restamos s3-x1

Para s4 multiplicamos el renglón pivote por 0 y restamos s4-x1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | X1 | X2 | S1 | S2 | S3 | S4 | Solución |
| Z | 0 | -10 | 0 | 0 | 0 | 0 | 1400 |
| S1 | 0 | 2 | 1 | 0 | 0 | 0 | 50 |
| S2 | 0 | 1 | 0 | 1 | 0 | 0 | 20 |
| X1 | 1 | 0 | 0 | 0 | 1 | 0 | 70 |
| S4 | 0 | 1 | 0 | 0 | 0 | 1 | 50 |

Entra x2 y sale s2

Para Z multiplicamos el renglón pivote por 10 y sumamos Z+x2

Para s1 multiplicamos el renglón pivote por 2 y restamos s1-x2

Para s2 multiplicamos el renglón pivote por 1 y restamos s2-x2

Para x1 multiplicamos el renglón pivote por 0 y restamos x1-x2

Para s4 multiplicamos el renglón pivote por 0 y restamos s4-x2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | X1 | X2 | S1 | S2 | S3 | S4 | Solución |
| Z | 0 | 0 | 0 | 10 | 10 | 0 | 1600 |
| S1 | 0 | 0 | 1 | -2 | 1 | 0 | 10 |
| x2 | 0 | 1 | 0 | 1 | -1 | 0 | 20 |
| X1 | 1 | 0 | 0 | 0 | 1 | 0 | 70 |
| S4 | 0 | 0 | 0 | -1 | 1 | 1 | 30 |

Llegamos a la solución con

Z=1600 x1=70 y x2=20