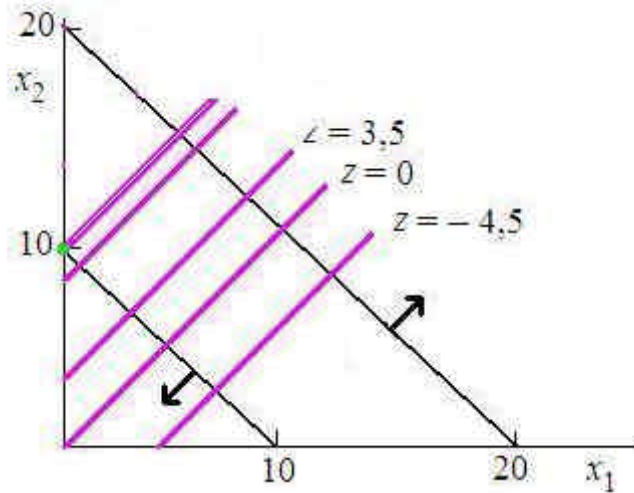


Impossible ?

| | | |
|--|--|-----|
| | $[\max] x_2 - x_1$ $x_1 + x_2 \leq 10$ $x_1 + x_2 \geq 20$ | {1} |
|--|--|-----|



| | | |
|--|---|-----|
| | $[\max] z = -x_1 + x_2$ $\text{s. to } x_1 + x_2 \leq 10$ $x_1 + x_2 \geq 20$ | {2} |
|--|---|-----|

$M \cong +\infty$

| | | |
|--|--|-----|
| | $[\max] z = -x_1 + x_2 + 0x_3 + 0x_4 - Mx_5$ $\text{s. to } x_1 + x_2 + x_3 = 10$ $x_1 + x_2 - x_4 + x_5 = 20$ | {3} |
|--|--|-----|

Solve:

Go to <http://web.ist.utl.pt/~mcasquilho/compute/or/Fx-lp-revised.php>

Supply:

| | |
|---------------|-------------------------------|
| Opt. | max |
| Coefficients | -1 1 0 0 0 |
| A B | 1 1 1 0 0 10 1 1 0 -1 1 20 |
| Artificials | 5 |
| Big M | 1+2 |
| Initial basis | 3 5 |

```

SOLUTION, at Iteration 1
Objective function,          -990.0      | MAXIMUM
Variable  value
      2    10.00
      5    10.00
    
```

Impossible ? No problem.

