

mbruner3_9

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```
rm(list=ls())
```

```
library(lpSolveAPI)
```

```
gp <- read.lp("gp.lp")
gp
```

```
## Model name:
##           x1    x2    x3    y1p    y1n    y2n    y2p
## Maximize   20    15    25     -6     -6     -3     0
## R1         6     4     5     -1     1     0     0    =   50
## R2         8     7     5      0      0     1     -1   >=   75
## Kind       Std   Std   Std   Std   Std   Std   Std
## Type       Real  Real  Real  Real  Real  Real  Real
## Upper      Inf   Inf   Inf   Inf   Inf   Inf   Inf
## Lower       0     0     0     0     0     0     0
```

```
solve(gp)
```

```
## [1] 0
```

```
get.objective(gp)
```

```
## [1] 225
```

```
get.variables(gp)
```

```
## [1] 0 0 15 25 0 0 0
```

Summary

The maximum profit given the goals would be 225 million dollars if they produce only 15 units of Product 3 and 0 of Product 1 and 2, respectively. Also, both the goals are met of employment and earnings.