

Prob 1

	F	G	
	tanks	garbage	
# units	13.3333333333333	46.6666666666667	Total
Profit	80	25	=SUMPRODUCT(B6:C6,B7:C7)
constraints			
steel	8	2	=SUMPRODUCT(B6:C6,B9:C9) <= 200
labor	5	2	=SUMPRODUCT(B6:C6,B10:C10) <= 160
			LHS SIGN RHS

Microsoft Excel 12.0 Answer  
Worksheet: [Book1]Sheet1  
Report Created: 10/12/2010

Target Cell (Max)

Cell	Name	Original Value	Final Value
\$D\$7	Profit Total	0	2233.33333333333

Adjustable Cells

Cell	Name	Original Value	Final Value
\$B\$6	# units tanks	0	13.3333333333333
\$C\$6	# units garbage	0	46.6666666666667

Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$D\$9	steel Total	200	\$D\$9<=\$F\$9	Binding	0
\$D\$10	labor Total	160	\$D\$10<=\$F\$10	Binding	0

Microsoft Excel 11.0 Sensitiv  
Worksheet: [LP\_inclass.xls]\$  
Report Created: 06/11/2010

Adjustable Cells

Cell	Name	Final Value	Reduced Cost	Objective Coefficient	Allowable Increase	Allowable Decrease
\$B\$6	# units tanks	13.3333333333333	0	79.99999999999272	20.0000000000329	17.49999999999003
\$C\$6	# units garbage	46.6666666666667	0	25.0000000000026	6.9999999999644	5.00000000007463

Constraints

Cell	Name	Final Value	Shadow Price	Constraint R.H. Side	Allowable Increase	Allowable Decrease
\$D\$9	steel Total	200	5.8333333327226	200	56.00000000003015	40.000000000191
\$D\$10	labor Total	160	6.66666666674449	160	40.000000000191	35.0000000001138

