

## Appendices A

### Microsoft Excel 12.0 Answer Report

Worksheet: [portfolio.xlsx]Sheet2

#### Target Cell (Max)

Cell	Name	Original Value	Final Value
\$G\$9	Return total	0	19,25

#### Adjustable Cells

Cell	Name	Original Value	Final Value
\$C\$10	Solution X1	0	0
\$D\$10	Solution X2	0	10
\$E\$10	Solution X3	0	10
\$F\$10	Solution X4	0	0

#### Constraints

Cell	Name	Cell Value	Formula	Status	Slack
\$G\$5	Budget total	25	\$G\$5<=\$I\$5	Binding	0
\$G\$6	Risk 1 total	10	\$G\$6<=\$I\$6	Not Binding	5
\$G\$7	Risk 2 total	15	\$G\$7<=\$I\$7	Binding	0
\$G\$8	Risk 3 total	15	\$G\$8>=\$I\$8	Binding	0

### Microsoft Excel 12.0 Sensitivity Report

Worksheet: [portfolio.xlsx]Sheet2

#### Adjustable Cells

Cell	Name	Final Value	Reduced Cost	Objective Coefficient	Allowable Increase	Allowable Decrease
\$C\$10	Solution X1	0	0	0,5	0,15	1E+30
\$D\$10	Solution X2	15	0	0,75	1E+30	0,15
\$E\$10	Solution X3	10	0	0,8	1E+30	0,15
\$F\$10	Solution X4	0	0	0,9	0,15	1E+30

#### Constraints

Cell	Name	Final Value	Shadow Price	Constraint R.H. Side	Allowable Increase	Allowable Decrease
\$G\$5	Budget total	25	0,8	25	5	10
\$G\$6	Risk 1 total	10	0	15	1E+30	5
\$G\$7	Risk 2 total	15	0,25	15	0	5
\$G\$8	Risk 3 total	15	-0,3	15	10	0