

# Capital Budgeting

Use the decision criteria to evaluate the following project:

Year	0	1	2	3
CF	-1000.00	400.00	500.00	300.00

Discount Rate  
Reinvestment Rate  
Payback Time Horizon

# Capital Budgeting: Payback/Discounted Payback Period

Use the decision criteria to evaluate the following project:

Year	0	1	2	3
CF	-1000.00	400.00	500.00	300.00

Discount Rate  
Reinvestment Rate  
Payback Time Horizon

<b>Payback</b>					<b>Payback Period</b>
CF	-1000.00	400.00	500.00	300.00	
Cumulative	-1000.00	-600.00	-100.00	200.00	
			<b>NO</b>	=IF(E11>0, "YES", "NO")	

<b>Discounted Payback</b>					<b>Disc. Pay. Period</b>
PV(CF)	-1000.00	\$357.14	\$398.60	\$213.53	
Cumulative	-1000.00	-642.86	-244.26	-30.73	
			<b>NO</b>	=IF(E16>0, "YES", "NO")	

12%

10%

2

=18+ABS(E11)/F10

2.33 years

None

# Capital Budgeting: Net Present Value (NPV)

Use the decision criteria to evaluate the following project:

Year	0	1	2	3
CF	-1000.00	400.00	500.00	300.00

Discount Rate  
Reinvestment Rate  
Payback Time Horizon

**NPV**

=NPV(I6,D7:F7)+C7

-30.73

**NO** =IF(C11>0, "YES", "NO")

12%

10%

2

# Capital Budgeting: Profitability Index (PI)

Use the decision criteria to evaluate the following project:

Year	0	1	2	3
CF	-1000.00	400.00	500.00	300.00

Discount Rate  
Reinvestment Rate  
Payback Time Horizon

**PI**  
=NPV(I6,D7:F7)/C7  
-0.97  
**NO**

12%

10%

2

# Capital Budgeting: Internal Rate of Return (IRR)

Use the decision criteria to evaluate the following project:

Year	0	1	2	3
CF	-1000.00	400.00	500.00	300.00

Discount Rate  
Reinvestment Rate  
Payback Time Horizon

**IRR**  
=IRR(C7:F7)  
10.13%  
**NO**



12%

10%

2

# Capital Budgeting: Modified Internal Rate of Return (MIRR)

Use the decision criteria to evaluate the following project:

Year	0	1	2	3
CF	-1000.00	400.00	500.00	300.00

Discount Rate  
Reinvestment Rate  
Payback Time Horizon

**MIRR**

=MIRR(C7:F7,I6,I7)

10.08%

**YES**

12%

10%

2

# Capital Budgeting: NPV Profile

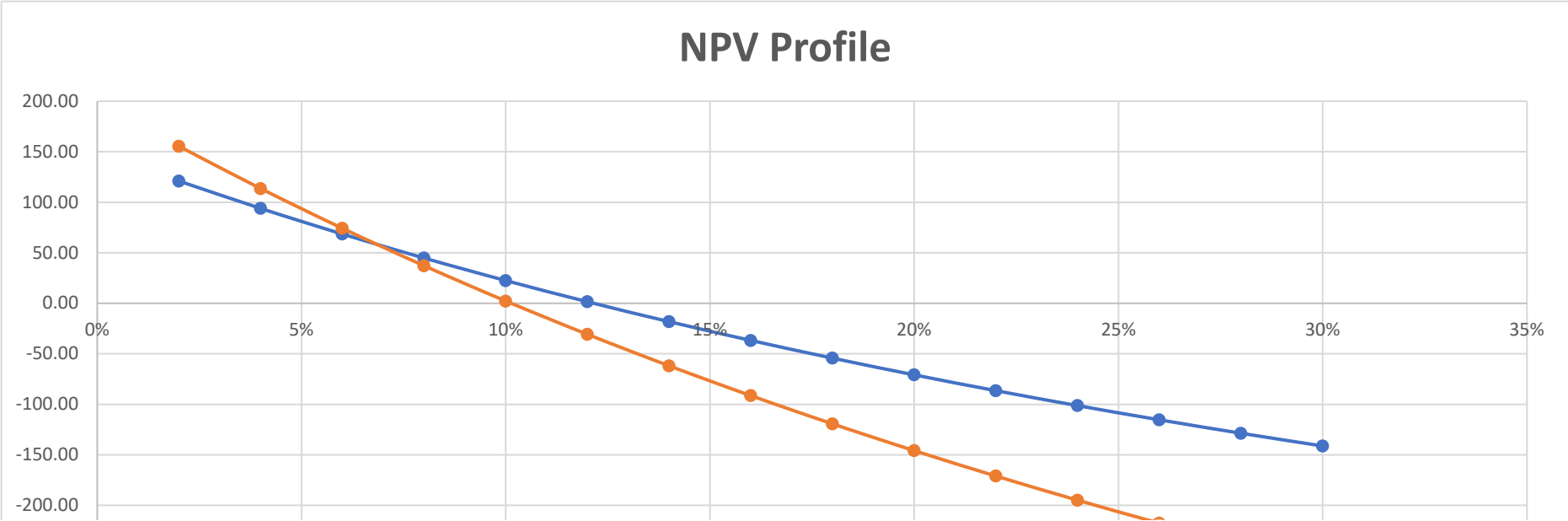
Construct the NPV Profile.

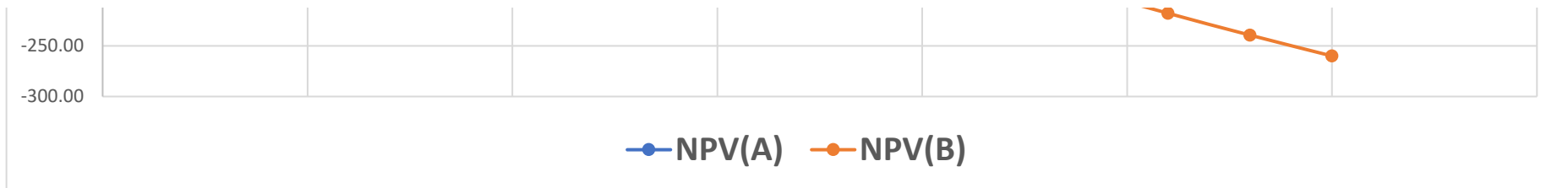
Year	0	1	2	3
CF(A)	-550	200	200	300
CF(B)	-1000.00	400.00	500.00	300.00

Discount Rate

**NPV(A)**  
 $=NPV(I6,D7:F7)+C7$   
 121.01

**NPV(B)**  
 $=NPV(I6,D8:F8)+C8$   
 155.44





2%

<b>Rate</b>	<b>NPV(A)</b>	<b>NPV(B)</b>
2%	121.01	155.44
4%	93.92	113.59
6%	68.56	74.24
8%	44.80	37.19
10%	22.50	2.25
12%	1.54	-30.73
14%	-18.18	-61.90
16%	-36.76	-91.39
18%	-54.28	-119.34
20%	-70.83	-145.83
22%	-86.48	-170.99
24%	-101.29	-194.89
26%	-115.32	-217.63
28%	-128.63	-239.27
30%	-141.26	-259.90

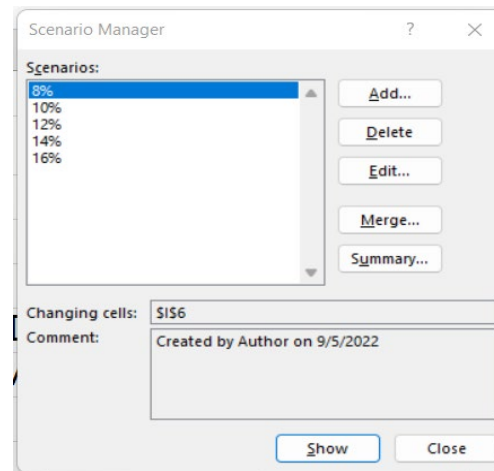
# Capital Budgeting: Scenario Manager

Use the decision criteria to evaluate the following project:

Year	0	1	2	3
CF	-1000.00	400.00	500.00	300.00

Discount Rate  
Reinvestment Rate  
Payback Time Horizon

**NPV**  
=NPV(I6,D7:F7)+C7  
37.19  
**YES**

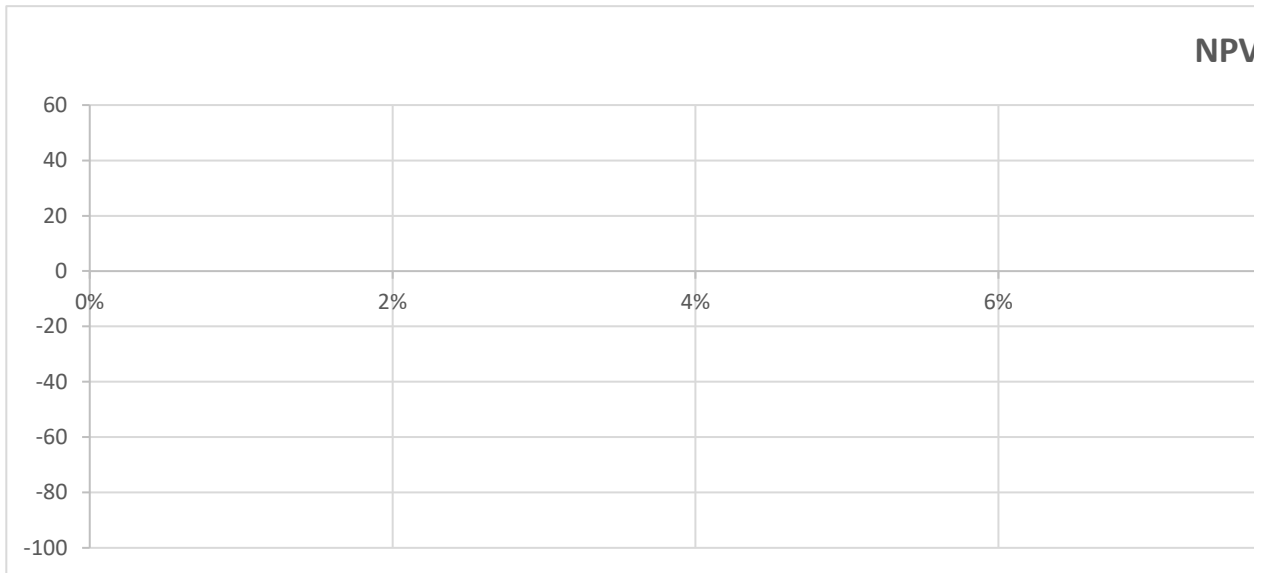


8%  
10%  
2



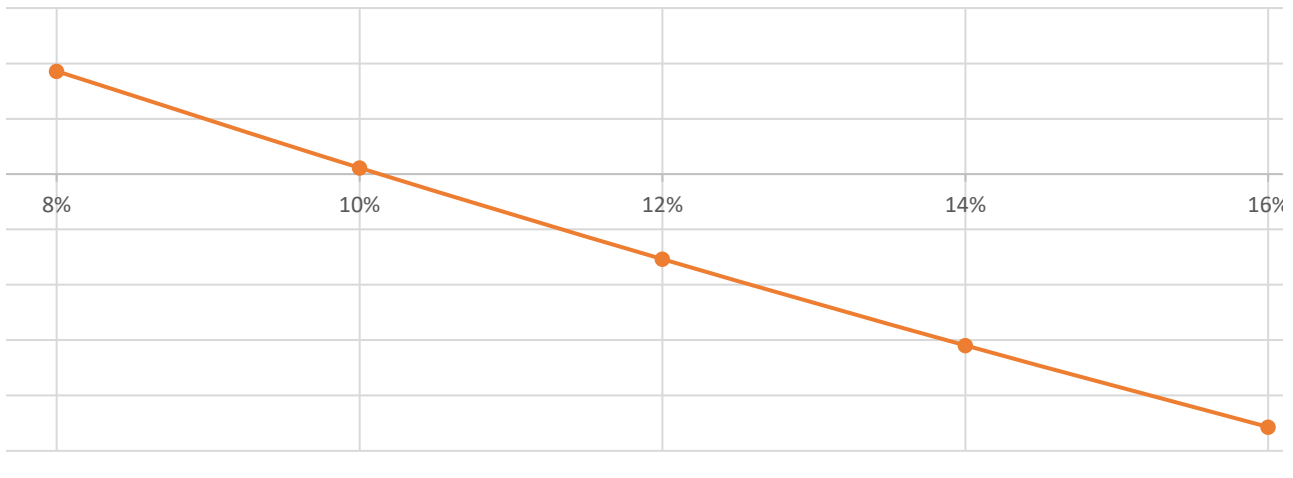
Scenario Summary					
	Current Values:	8%	10%	12%	14%
<b>Changing Cells:</b>					
<b>\$I\$6</b>	8%	8%	10%	12%	14%
<b>Result Cells:</b>					
<b>\$C\$11</b>	37.19	37.19	2.25	-30.73	-61.90
<b>\$C\$12</b>	YES	YES	YES	NO	NO

Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.



16%
16%
-91.39
NO

### / for Varying Discount Rates



6	18%