

<b>1.011 Assignment 3, Spreadsheet Solutions</b>					
Lexcie Lu , MIT Center for Transportation Studies					
		Effective %	Nominal %		
Effective to Nominal:		12.7497%	12.0000%		
Nominal Interest Rate i% =			18%	<i>(Manually enter Nominal value)</i>	
Year	Cash flow	Factor	Present V:	Cumulativ	"Payback"
(t)	(Ct)	(1+i)^t	(Ct)/(1+i)^t	Intgrt[PV]	
0	-20	1	-20	-20	Not yet
1	2	1.18	1.6949153	-18.30508	Not yet
2	4	1.3924	2.8727377	-15.43235	Not yet
3	5	1.643032	3.0431544	-12.38919	Not yet
4	5	1.9387778	2.5789444	-9.810248	Not yet
5	5	2.2877578	2.1855461	-7.624702	Not yet
6	5	2.6995542	1.8521577	-5.772545	Not yet
7	5	3.1854739	1.5696252	-4.202919	Not yet
8	5	3.7588592	1.3301908	-2.872729	Not yet
9	5	4.4354539	1.1272804	-1.745448	Not yet
10	5	5.2338356	0.9553223	-0.790126	Not yet
11	5	6.175926	0.8095952	0.0194694	Yes
12	5	7.2875926	0.6860976	0.705567	Yes
13	5	8.5993593	0.5814387	1.2870057	Yes
14		10.147244	0	1.2870057	Yes
15		11.973748	0	1.2870057	Yes
16		14.129023	0	1.2870057	Yes
17		16.672247	0	1.2870057	Yes
18		19.673251	0	1.2870057	Yes
19		23.214436	0	1.2870057	Yes
20		27.393035	0	1.2870057	Yes
INPUT					
Net Present Value =			1.2870057		
Year Mf =			10		
Future Value at year Mf =			6.735976	<i>(beginning of year)</i>	
Annuity Starting Year Ma =			0	<i>(First year is when</i>	
Annuity Length =			10	<i>loan committed)</i>	
Equivalent Annuity =			0.2863776		