

14. a. $PV_0 = \$8,000 = R(PVIFA_{1\%,36})$
 $= R[(1 - [1/(1 + .01)^{36}])/(0.01)] = R(30.108)$
 Therefore, $R = \$8,000/30.108 = \265.71

End of Month	(1) Installment Payment	(2) Monthly Interest (4) _{t-1} × 0.01	(3) Principal Payment (1) – (2)	(4) Principal Amount Owing At Month End (4) _{t-1} – (3)
0	--	--	--	\$8,000.00
1	\$ 265.71	\$ 80.00	\$ 185.71	7,814.29
2	265.71	78.14	187.57	7,626.72
3	265.71	76.27	189.44	7,437.28
4	265.71	74.37	191.34	7,245.94
5	265.71	72.46	193.25	7,052.69
6	265.71	70.53	195.18	6,857.51
7	265.71	68.58	197.13	6,660.38
8	265.71	66.60	199.11	6,461.27
9	265.71	64.61	201.10	6,260.17
10	265.71	62.60	203.11	6,057.06
11	265.71	60.57	205.14	5,851.92
12	265.71	58.52	207.19	5,644.73
13	265.71	56.44	209.27	5,435.46
14	265.71	54.35	211.36	5,224.10
15	265.71	52.24	213.47	5,010.63
16	265.71	50.11	215.60	4,795.03
17	265.71	47.97	217.76	4,577.27
18	265.71	45.77	219.94	4,357.33
19	265.71	43.57	222.14	4,135.19
20	265.71	41.35	224.36	3,910.83
21	265.71	39.11	226.60	3,684.23
22	265.71	36.84	228.87	3,455.36
23	265.71	34.55	231.16	3,224.20
24	265.71	32.24	233.47	2,990.73
25	265.71	29.91	235.80	2,754.93
26	265.71	27.55	238.16	2,516.77
27	265.71	25.17	240.54	2,276.23
28	265.71	22.76	242.95	2,033.28
29	265.71	20.33	245.38	1,787.90
30	265.71	17.88	247.83	1,540.07
31	265.71	15.40	250.31	1,289.76
32	265.71	12.90	252.81	1,036.95
33	265.71	10.37	255.34	781.61
34	265.71	7.82	257.89	523.72
35	265.71	5.24	260.47	263.25
36	265.88*	2.63	263.25	0.00
	\$9,565.73	\$1,565.73	\$8,000.00	

*The last payment is slightly higher due to rounding throughout .