

I/Y	8.00%	Net Return	7.97%	Example:			
3 BIPs	0.03%			Federal Thrift Savings Pla			
PV	\$0					Croupier's Shortfall as	
PMT	-\$1,000		Net Gain	Market Return	Net	Take / Fin	Percent of
Years (N	Total Investmer	FV at 7.97%	at 7.97%	of 8%	Market Gain	Shortfall	Market Gain
5	\$5,000	\$5,863	\$863	\$5,867	\$867	\$4	0.40%
10	\$10,000	\$14,466	\$4,466	\$14,487	\$4,487	\$21	0.46%
15	\$15,000	\$27,089	\$12,089	\$27,152	\$12,152	\$63	0.52%
20	\$20,000	\$45,610	\$25,610	\$45,762	\$25,762	\$152	0.59%
25	\$25,000	\$72,786	\$47,786	\$73,106	\$48,106	\$320	0.66%
30	\$30,000	\$112,662	\$82,662	\$113,283	\$83,283	\$622	0.75%
35	\$35,000	\$171,170	\$136,170	\$172,317	\$137,317	\$1,146	0.83%
I/Y	8.00%	Net Return	7.80%	Example:	Vanguard		
20 BIPs	0.20%						
PV	\$0					Croupier's Shortfall as	
PMT	-\$1,000		Net Gain	Market Return	Net	Take / Fin	Percent of
Years (N	Total Investmer	FV at 7.80%	at 7.80%	of 8%	Market Gain	Shortfall	Market Gain
5	\$5,000	\$5,843	\$843	\$5,867	\$867	\$23	2.69%
10	\$10,000	\$14,350	\$4,350	\$14,487	\$4,487	\$137	3.05%
15	\$15,000	\$26,733	\$11,733	\$27,152	\$12,152	\$419	3.45%
20	\$20,000	\$44,761	\$24,761	\$45,762	\$25,762	\$1,001	3.89%
25	\$25,000	\$71,005	\$46,005	\$73,106	\$48,106	\$2,101	4.37%
30	\$30,000	\$109,210	\$79,210	\$113,283	\$83,283	\$4,073	4.89%
35	\$35,000	\$164,828	\$129,828	\$172,317	\$137,317	\$7,489	5.45%
I/Y	8.00%	Net Return	7.50%	Example:	TIAA-CREF		
50 BIPs	0.50%						
PV	\$0					Croupier's Shortfall as	
PMT	-\$1,000		Net Gain	Market Return	Net	Take / Fin	Percent of
Years (N	Total Investmer	FV at 7.50%	at 7.50%	of 8%	Market Gain	Shortfall	Market Gain
5	\$5,000	\$5,808	\$808	\$5,867	\$867	\$58	6.72%
10	\$10,000	\$14,147	\$4,147	\$14,487	\$4,487	\$339	7.57%
15	\$15,000	\$26,118	\$11,118	\$27,152	\$12,152	\$1,034	8.51%
20	\$20,000	\$43,305	\$23,305	\$45,762	\$25,762	\$2,457	9.54%
25	\$25,000	\$67,978	\$42,978	\$73,106	\$48,106	\$5,128	10.66%
30	\$30,000	\$103,399	\$73,399	\$113,283	\$83,283	\$9,884	11.87%
35	\$35,000	\$154,252	\$119,252	\$172,317	\$137,317	\$18,065	13.16%
I/Y	8.00%	Net Return	7.00%	Example:	T. Rowe Price		
100 BIPs	1.00%						
PV	\$0					Croupier's Shortfall as	
PMT	-\$1,000		Net Gain	Market Return	Net	Take / Fin	Percent of
Years (N	Total Investmer	FV at 7.00%	at 7.00%	of 8%	Market Gain	Shortfall	Market Gain
5	\$5,000	\$5,751	\$751	\$5,867	\$867	\$116	13.37%
10	\$10,000	\$13,816	\$3,816	\$14,487	\$4,487	\$670	14.94%
15	\$15,000	\$25,129	\$10,129	\$27,152	\$12,152	\$2,023	16.65%
20	\$20,000	\$40,995	\$20,995	\$45,762	\$25,762	\$4,766	18.50%
25	\$25,000	\$63,249	\$38,249	\$73,106	\$48,106	\$9,857	20.49%
30	\$30,000	\$94,461	\$64,461	\$113,283	\$83,283	\$18,822	22.60%
35	\$35,000	\$138,237	\$103,237	\$172,317	\$137,317	\$34,080	24.82%
I/Y	8.00%	Net Return	6.50%	Example:	Average Mutual Fund		
150 BIPs	1.50%						
PV	\$0					Croupier's Shortfall as	
PMT	-\$1,000		Net Gain	Market Return	Net	Take / Fin	Percent of

Years (N	Total Investmer	FV at 6.50%	at 6.50%	of 8%	Market Gain	Shortfall	Market Gair
5	\$5,000	\$5,694	\$694	\$5,867	\$867	\$173	19.96%
10	\$10,000	\$13,494	\$3,494	\$14,487	\$4,487	\$992	22.11%
15	\$15,000	\$24,182	\$9,182	\$27,152	\$12,152	\$2,970	24.44%
20	\$20,000	\$38,825	\$18,825	\$45,762	\$25,762	\$6,937	26.93%
25	\$25,000	\$58,888	\$33,888	\$73,106	\$48,106	\$14,218	29.56%
30	\$30,000	\$86,375	\$56,375	\$113,283	\$83,283	\$26,908	32.31%
35	\$35,000	\$124,035	\$89,035	\$172,317	\$137,317	\$48,282	35.16%
I/Y	8.00%	Net Return	6.00%	Example:			
200 BIPs	2.00%			Average Variable Annuity			
PV	\$0					Croupier's Shortfall as	
PMT	-\$1,000		Net Gai	Market Retu	Net	Take / Fin	Percent of
Years (N	Total Investmer	FV at 6.00%	at 6.00%	of 8%	Market Gain	Shortfall	Market Gair
5	\$5,000	\$5,637	\$637	\$5,867	\$867	\$230	26.48%
10	\$10,000	\$13,181	\$3,181	\$14,487	\$4,487	\$1,306	29.10%
15	\$15,000	\$23,276	\$8,276	\$27,152	\$12,152	\$3,876	31.90%
20	\$20,000	\$36,786	\$16,786	\$45,762	\$25,762	\$8,976	34.84%
25	\$25,000	\$54,865	\$29,865	\$73,106	\$48,106	\$18,241	37.92%
30	\$30,000	\$79,058	\$49,058	\$113,283	\$83,283	\$34,225	41.09%
35	\$35,000	\$111,435	\$76,435	\$172,317	\$137,317	\$60,882	44.34%