The Power of Compounding Interest

An example of compound interest and the advantage of saving early.

Investor A was 19 years old and made $2,000 contributions for 8 years.
Investor B was age 27 and contributed $2,000 annually through age 65.

The total contribution for Investor B was $78,000 versus Investor A's $16,000. But the final aggregate was $805,000 for Investor B versus $1,019,000 for Investor A assuming a 10% compound total return.

Investor A

Age	IRA Contribution	Year-End Value
19	$2,000	$2,200
20	2,000	4,620
21	2,000	7,282
22	2,000	10,210
23	2,000	13,431
24	2,000	16,974
25	2,000	20,872
26	2,000	25,159
27	0	27,675
28	0	30,442
29	0	33,487
30	0	36,835
31	0	40,519
32	0	44,571
33	0	49,028
34	0	53,930
35	0	59,323
36	0	65,256
37	0	71,781
38	0	78,960
39	0	86,856
40	0	95,541
41	0	105,095
42	0	115,605
43	0	127,165
44	0	139,882
45	0	153,870
46	0	169,257
47	0	186,183
48	0	204,801
49	0	225,281
50	0	247,809
51	0	272,590
52	0	299,849
53	0	329,834
54	0	362,817
55	0	399,099
56	0	439,009
57	0	482,910
58	0	531,201
59	0	584,321
60	0	642,753
61	0	707,028
62	0	777,731
63	0	855,504
64	0	941,054
65	0	1,035,160
Less Total Invested		(16,000)
Net Earnings		$1,019,160
Money Grew		64-fold

Investor B

Age	IRA Contribution	Year-End Value
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	$2,000	$2,200
28	$2,000	4,620
29	$2,000	7,282
30	$2,000	10,210
31	$2,000	13,431
32	$2,000	16,974
33	$2,000	20,872
34	$2,000	25,159
35	$2,000	29,875
36	$2,000	35,062
37	$2,000	40,769
38	$2,000	47,045
39	$2,000	53,950
40	$2,000	61,545
41	$2,000	69,899
42	$2,000	79,089
43	$2,000	89,198
44	$2,000	100,318
45	$2,000	112,550
46	$2,000	126,005
47	$2,000	140,805
48	$2,000	157,086
49	$2,000	174,995
50	$2,000	194,694
51	$2,000	216,364
52	$2,000	240,200
53	$2,000	266,420
54	$2,000	295,262
55	$2,000	326,988
56	$2,000	361,887
57	$2,000	400,276
58	$2,000	442,503
59	$2,000	488,953
60	$2,000	540,049
61	$2,000	596,254
62	$2,000	658,079
63	$2,000	726,087
64	$2,000	800,896
65	$2,000	883,185
		(78,000)
		$805,185
		11-fold