

WIN MAKE GIVE



WEALTH SERIES

2.0

PART SIX
Compound Interest

Part Six - Compound Interest

You've probably heard the saying, "The rich get richer, and the poor get poorer." The reality is that the rich get richer because they utilize compound interest to grow their money. When you are in a position to leave your money in a high interest-bearing account for long periods of time, the more it grows.

The good news is that anyone can tap into this powerful money-making tool, and the key is understanding how it works. In this session, we break down **compound interest, which is interest paid on interest**, and how you can use it to build wealth and reach your financial goals.

Included in the workbook are compound interest calculators (you can also download them at WinMakeGive.com/wealth-part-6) and exercises to help you understand compounding. Be sure to have the red and yellow highlighter exercises from Part Two and Part Five handy and take the time to work through these real-life examples of optional or unnecessary expenses you may have, like a Starbucks coffee or Hulu streaming fee, to see how that money would compound if invested.

What I hope you take away from this lesson is knowing the value of investing and saving, versus spending, because you now understand what those dollars can become.



Ben Kinney

Ben Kinney Companies Founder

WinMakeGive.com

COMPOUND INTEREST



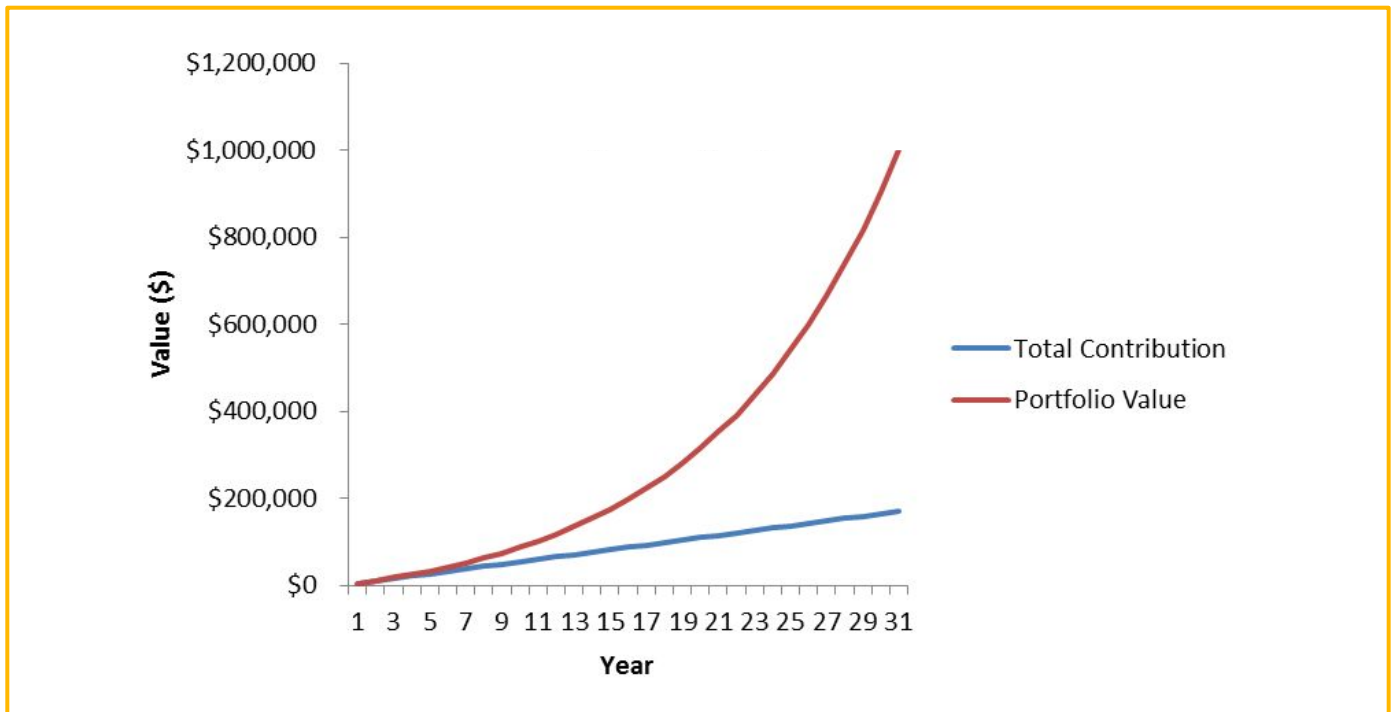
“There will be good years
and there will be bad years,
but the compounding will
continue on unabated.”

- Pietros Maneos -

Compound Interest

Definition = _____ on _____ .

It is the result of reinvesting interest rather than paying it out so that interest earned in the next term is then earned on the principal sum and any previously accumulated interest.



**“COMPOUND INTEREST IS THE
EIGHTH WONDER OF THE WORLD.
HE WHO UNDERSTANDS IT, EARNS
IT. HE WHO DOESN'T... PAYS IT.”**

- ALBERT EINSTEIN -

Power of Compounding Interest

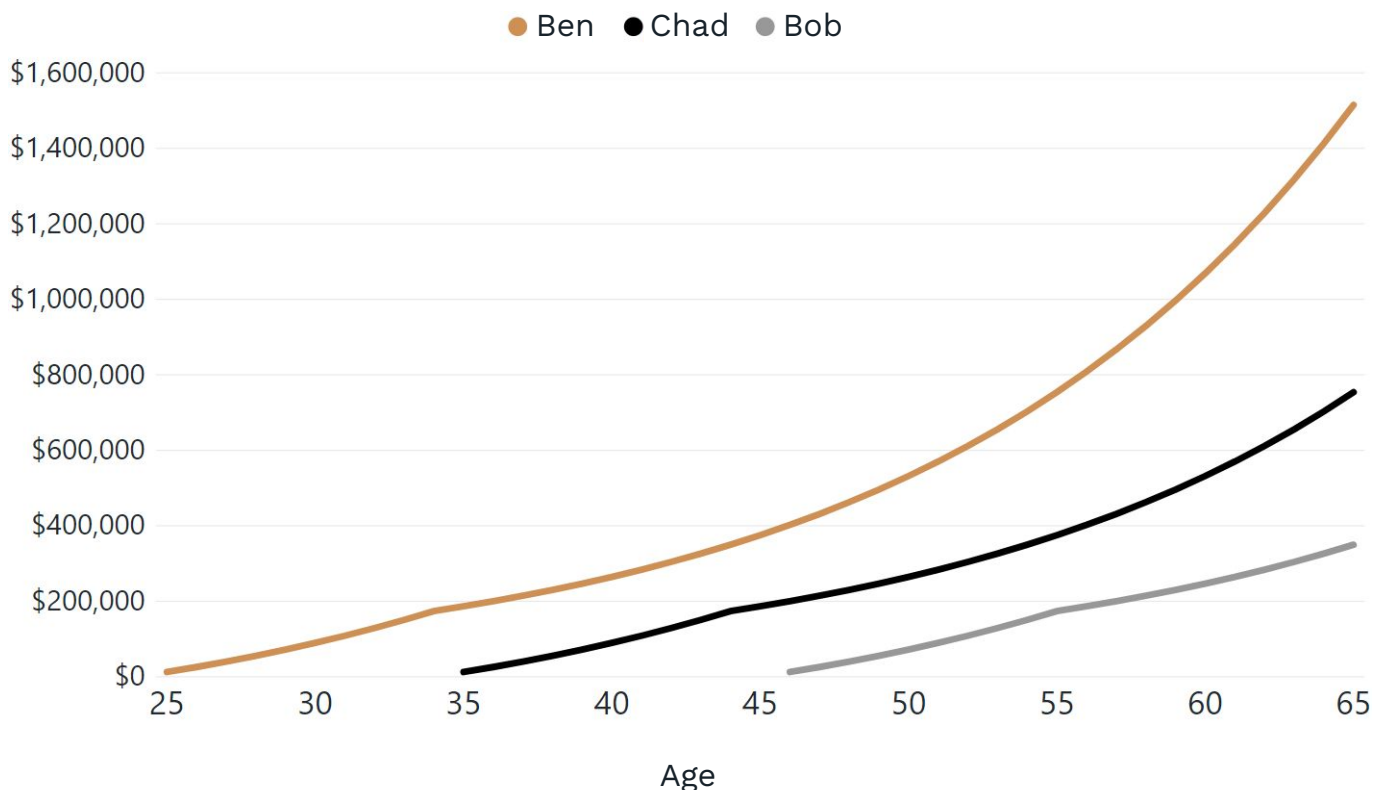
Let's look at this another way. Ben, Chad, and Bob contributed \$1,000 a month for ten years to an investment account with a compound interest rate of 7%. Ben started saving at age 25 and stopped at age 35. Chad started saving at age 35 and stopped at age 45. Bob started saving at age 45 and stopped at age 55.

Each person let the money sit in their accounts until they turned 65.

By the time they were 65:

- Ben earned **\$1,515,186**
- Chad earned **\$753,951**
- Bob earned **\$349,871**

The lesson here is the amount of time invested matters, and compound interest works when the investment account is allowed to grow without any withdrawals.



How \$1,000 Grows

In the chart below, we look at \$1,000 invested over time at different rates of return. We learn here that **rate of return** and **time invested** both matter. See what happens to \$1,000 and it is compounded monthly at various rates of return and over different periods of time.

Years	Annual Interest Rate					
	5%	8%	10%	12%	15%	20%
1	\$1,051	\$1,083	\$1,105	\$1,127	\$1,161	\$1,219
2	\$1,105	\$1,173	\$1,220	\$1,270	\$1,347	\$1,487
3	\$1,161	\$1,270	\$1,348	\$1,431	\$1,564	\$1,813
4	\$1,221	\$1,376	\$1,489	\$1,612	\$1,815	\$2,211
5	\$1,283	\$1,490	\$1,645	\$1,817	\$2,107	\$2,696
6	\$1,349	\$1,614	\$1,818	\$2,047	\$2,446	\$3,287
7	\$1,418	\$1,747	\$2,008	\$2,307	\$2,839	\$4,009
8	\$1,491	\$1,892	\$2,218	\$2,599	\$3,296	\$4,888
9	\$1,567	\$2,050	\$2,450	\$2,929	\$3,825	\$5,961
10	\$1,647	\$2,220	\$2,707	\$3,300	\$4,440	\$7,268
11	\$1,731	\$2,404	\$2,991	\$3,719	\$5,154	\$8,863
12	\$1,820	\$2,603	\$3,304	\$4,191	\$5,983	\$10,807
13	\$1,913	\$2,819	\$3,650	\$4,722	\$6,944	\$13,178
14	\$2,011	\$3,053	\$4,032	\$5,321	\$8,061	\$16,069
15	\$2,114	\$3,307	\$4,454	\$5,996	\$9,356	\$19,595
20	\$2,713	\$4,927	\$7,328	\$10,893	\$19,715	\$52,828
30	\$4,468	\$10,936	\$19,837	\$35,950	\$87,541	\$383,964
40	\$7,358	\$24,273	\$53,701	\$118,648	\$388,701	\$2,790,748
50	\$12,119	\$53,878	\$145,370	\$391,583	\$1,725,914	\$20,283,868
100	\$146,879	\$2,902,859	\$21,132,415	\$153,337,557	\$2,978,778,867	\$411,435,302,214

Get our free Compound Interest Calculator
at WinMakeGive.com/wealth-part-6/

Compound Interest: The Rule of 72

The Rule of 72 is a way to estimate how long it will take to _____ your _____.

EQUATION

Years required to double investment = $72 / \text{compound interest rate}$

PERCENT	YEARS	PERCENT	YEARS
1%	72 years	18%	_____
2%	_____	19%	_____
3%	_____	20%	3.6 years
4%	_____	25%	_____
5%	14.4 years	30%	_____
6%	_____	35%	_____
7%	_____	40%	1.8 years
8%	_____	45%	_____
9%	_____	50%	_____
10%	7.2 years	55%	_____
11%	_____	60%	_____
12%	_____	65%	_____
13%	_____	70%	_____
14%	_____	75%	_____
15%	_____	80%	0.9 years
16%	_____	85%	_____
17%	_____	90%	_____

The rule of 72 is a quick and easy model. If you were getting a 15% return, it would take you 4.8 years to double your money. Calculate how long it would take if your rate of return was 18%.

$72 / 18 =$ years

Compound Interest - $A = P(1+R)^t$

A = Total money in account

P = Principle (initial investment)

R = Annual interest rate

t = Time invested

Example: \$1,000 invested at 11% for 3 years

Initial Investment = \$1,000

R = 11% rate of return

t = 3 years

Year One. A = \$1,000 principle balance + \$110 in interest earned

Year Two. A = \$1,110 principle balance + \$122.10 in interest earned

Year Three. A = \$1,232.10 principle balance + \$135.53 in interest earned

Ending Balance = \$1,367.63 (\$1000 of initial investment plus \$367.63 return)

These numbers may not change your life, but if you left that same \$1,000 invested for 30 years, that \$1,000 would turn into \$22,892.

Compound Interest Examples

This is where you really see the missed opportunities. In the ‘Save Like Crazy’ workbook, you calculated how much you spend on optional items. In this exercise, look at what \$1,132 saved every month and invested at a **10% rate of return** would be worth over time. Then use the online compound interest calculators to see how much you could earn if you invested instead of spent on optional items each month.

Optional Item Cost Table					
Item #	Item/Title	Purchase Frequency	# times you spend per interval	Amount per spend	Monthly Expense or Deposit
1	Coffee	Weekly ▾	2	\$20	\$173
2	eat out	Weekly ▾	1	\$35	\$152
3		▾			\$0
4		▾			\$0
5		▾			\$0
6		▾			\$0
7		▾			\$0
8		▾			\$0
9		▾			\$0
10		▾			\$0
					\$325

Investment Value Table							
1 Year	5 Years	10 Years	15 Years	20 Years	30 Years	50 Years	75 Years
\$2,196	\$13,533	\$35,800	\$72,435	\$132,711	\$395,053	\$3,027,686	\$36,736,522
1,922	11,842	31,325	63,380	116,122	345,671	2,649,225	32,144,457
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
\$4,118	\$25,375	\$67,124	\$135,815	\$248,832	\$740,724	\$5,676,911	\$68,880,979

Try our free **Compounded Value of Optional Expenses** tool at WinMakeGive.com/wealth-part-6/

How Your Money Grows Annually

In the worksheets below, see what you would be able to earn over time starting with a balance of zero, contributing monthly, and based on a specific rate of return.

3% Annual Return								
Monthly Deposits	1 Year	5 Years	10 Years	15 Years	20 Years	30 Years	40 Years	50 Years
\$50	610	3,240	7,005	11,377	16,456	29,210	46,419	69,640
\$100	1,220	6,481	14,009	22,754	32,912	58,419	92,837	139,280
\$150	1,830	9,721	21,014	34,131	49,368	87,629	139,256	208,919
\$200	2,439	12,962	28,018	45,508	65,825	116,839	185,675	278,559
\$250	3,049	16,202	35,023	56,885	82,281	146,048	232,094	348,199
\$300	3,659	19,442	42,027	68,262	98,737	175,258	278,512	417,839
\$400	4,879	25,923	56,036	91,016	131,649	233,677	371,350	557,119
\$500	6,098	32,404	70,045	113,770	164,561	292,097	464,187	696,398
\$750	9,148	48,606	105,068	170,655	246,842	438,145	696,281	1,044,597
\$1,000	12,197	64,808	140,091	227,540	329,123	584,194	928,375	1,392,796
\$1,500	18,295	97,212	210,136	341,310	493,684	876,291	1,392,562	2,089,195
\$2,000	24,394	129,617	280,182	455,080	658,246	1,168,387	1,856,749	2,785,593
\$3,000	36,590	194,425	420,272	682,620	987,368	1,752,581	2,785,124	4,178,389
\$5,000	60,984	324,042	700,454	1,137,701	1,645,614	2,920,969	4,641,873	6,963,982
\$10,000	121,968	648,083	1,400,908	2,275,401	3,291,228	5,841,937	9,283,746	13,927,964
\$20,000	243,936	1,296,167	2,801,815	4,550,802	6,582,455	11,683,875	18,567,493	27,855,928

5% Annual Return								
Monthly Deposits	1 Year	5 Years	10 Years	15 Years	20 Years	30 Years	40 Years	50 Years
\$50	617	3,414	7,796	13,420	20,637	41,786	76,619	133,989
\$100	1,233	6,829	15,593	26,840	41,275	83,573	153,238	267,977
\$150	1,850	10,243	23,389	40,260	61,912	125,359	229,857	401,966
\$200	2,466	13,658	31,186	53,681	82,549	167,145	306,476	535,954
\$250	3,083	17,072	38,982	67,101	103,187	208,932	383,095	669,943
\$300	3,699	20,487	46,779	80,521	123,824	250,718	459,714	803,931
\$400	4,932	27,316	62,372	107,361	165,099	334,291	612,951	1,071,909
\$500	6,165	34,145	77,965	134,201	206,373	417,863	766,189	1,339,886
\$750	9,248	51,217	116,947	201,302	309,560	626,795	1,149,284	2,009,829
\$1,000	12,330	68,289	155,929	268,403	412,746	835,726	1,532,379	2,679,771
\$1,500	18,495	102,434	233,894	402,604	619,119	1,253,590	2,298,568	4,019,657
\$2,000	24,660	136,579	311,859	536,805	825,493	1,671,453	3,064,757	5,359,543
\$3,000	36,990	204,868	467,788	805,208	1,238,239	2,507,179	4,597,136	8,039,314
\$5,000	61,650	341,447	779,646	1,342,013	2,063,732	4,178,632	7,661,893	13,398,857
\$10,000	123,300	682,894	1,559,293	2,684,026	4,127,463	8,357,264	15,323,786	26,797,714
\$20,000	246,600	1,365,789	3,118,586	5,368,053	8,254,926	16,714,528	30,647,571	53,595,427

How Your Money Grows Annually

In the worksheets below, see what you would be able to earn over time starting with a balance of zero, contributing monthly, and based on a specific rate of return.

7% Annual Return								
Monthly Deposits	1 Year	5 Years	10 Years	15 Years	20 Years	30 Years	40 Years	50 Years
\$50	623	3,601	8,705	15,941	26,198	61,354	132,006	273,993
\$100	1,246	7,201	17,409	31,881	52,397	122,709	264,012	547,985
\$150	1,870	10,802	26,114	47,822	78,595	184,063	396,019	821,978
\$200	2,493	14,402	34,819	63,762	104,793	245,417	528,025	1,095,970
\$250	3,116	18,003	43,524	79,703	130,991	306,772	660,031	1,369,963
\$300	3,739	21,603	52,228	95,643	157,190	368,126	792,037	1,643,955
\$400	4,986	28,804	69,638	127,524	209,586	490,835	1,056,050	2,191,941
\$500	6,232	36,005	87,047	159,406	261,983	613,544	1,320,062	2,739,926
\$750	9,349	54,008	130,571	239,108	392,974	920,316	1,980,094	4,109,888
\$1,000	12,465	72,011	174,094	318,811	523,965	1,227,087	2,640,125	5,479,851
\$1,500	18,697	108,016	261,142	478,217	785,948	1,840,631	3,960,187	8,219,777
\$2,000	24,930	144,021	348,189	637,622	1,047,931	2,454,175	5,280,250	10,959,703
\$3,000	37,395	216,032	522,283	956,434	1,571,896	3,681,262	7,920,374	16,439,554
\$5,000	62,324	360,053	870,472	1,594,056	2,619,827	6,135,437	13,200,624	27,399,257
\$10,000	124,649	720,105	1,740,945	3,188,112	5,239,654	12,270,875	26,401,248	54,798,513
\$20,000	249,298	1,440,211	3,481,889	6,376,225	10,479,308	24,541,750	52,802,496	109,597,027

10% Annual Return								
Monthly Deposits	1 Year	5 Years	10 Years	15 Years	20 Years	30 Years	40 Years	50 Years
\$50	634	3,904	10,328	20,896	38,285	113,966	318,839	873,438
\$100	1,267	7,808	20,655	41,792	76,570	227,933	637,678	1,746,876
\$150	1,901	11,712	30,983	62,689	114,855	341,899	956,517	2,620,314
\$200	2,534	15,616	41,310	83,585	153,139	455,865	1,275,356	3,493,752
\$250	3,168	19,521	51,638	104,481	191,424	569,831	1,594,195	4,367,190
\$300	3,801	23,425	61,966	125,377	229,709	683,798	1,913,034	5,240,628
\$400	5,068	31,233	82,621	167,170	306,279	911,730	2,550,712	6,987,504
\$500	6,335	39,041	103,276	208,962	382,848	1,139,663	3,188,390	8,734,380
\$750	9,503	58,562	154,914	313,443	574,273	1,709,494	4,782,585	13,101,571
\$1,000	12,670	78,082	206,552	417,924	765,697	2,279,325	6,376,780	17,468,761
\$1,500	19,005	117,124	309,828	626,886	1,148,545	3,418,988	9,565,170	26,203,141
\$2,000	25,341	156,165	413,104	835,849	1,531,394	4,558,651	12,753,560	34,937,521
\$3,000	38,011	234,247	619,656	1,253,773	2,297,091	6,837,976	19,130,341	52,406,282
\$5,000	63,351	390,412	1,032,760	2,089,621	3,828,485	11,396,627	31,883,901	87,343,804
\$10,000	126,703	780,824	2,065,520	4,179,243	7,656,969	22,793,253	63,767,802	174,687,607
\$20,000	253,406	1,561,648	4,131,040	8,358,485	15,313,938	45,586,506	127,535,605	349,375,214

How Your Money Grows Annually

In the worksheets below, see what you would be able to earn over time starting with a balance of zero, contributing monthly, and based on a specific rate of return.

15% Annual Return								
Monthly Deposits	1 Year	5 Years	10 Years	15 Years	20 Years	30 Years	40 Years	50 Years
\$50	651	4,484	13,933	33,843	75,798	350,491	1,570,188	6,985,901
\$100	1,302	8,968	27,866	67,686	151,595	700,982	3,140,376	13,971,803
\$150	1,953	13,452	41,799	101,529	227,393	1,051,473	4,710,563	20,957,704
\$200	2,604	17,936	55,731	135,373	303,191	1,401,964	6,280,751	27,943,606
\$250	3,255	22,420	69,664	169,216	378,989	1,752,455	7,850,939	34,929,507
\$300	3,906	26,905	83,597	203,059	454,786	2,102,946	9,421,127	41,915,408
\$400	5,208	35,873	111,463	270,745	606,382	2,803,928	12,561,502	55,887,211
\$500	6,511	44,841	139,329	338,432	757,977	3,504,910	15,701,878	69,859,014
\$750	9,766	67,261	208,993	507,647	1,136,966	5,257,365	23,552,817	104,788,521
\$1,000	13,021	89,682	278,657	676,863	1,515,955	7,009,821	31,403,755	139,718,028
\$1,500	19,532	134,523	417,986	1,015,295	2,273,932	10,514,731	47,105,633	209,577,042
\$2,000	26,042	179,363	557,315	1,353,726	3,031,910	14,019,641	62,807,511	279,436,055
\$3,000	39,063	269,045	835,972	2,030,589	4,547,865	21,029,462	94,211,266	419,154,083
\$5,000	65,106	448,408	1,393,286	3,384,315	7,579,775	35,049,103	157,018,777	698,590,138
\$10,000	130,211	896,817	2,786,573	6,768,631	15,159,550	70,098,206	314,037,555	1,397,180,277
\$20,000	260,422	1,793,634	5,573,145	13,537,262	30,319,099	140,196,412	628,075,109	2,794,360,554

20% Annual Return								
Monthly Deposits	1 Year	5 Years	10 Years	15 Years	20 Years	30 Years	40 Years	50 Years
\$50	669	5,173	19,118	56,715	158,074	1,168,040	8,508,731	61,862,747
\$100	1,338	10,345	38,236	113,429	316,148	2,336,080	17,017,463	123,725,495
\$150	2,007	15,518	57,355	170,144	474,222	3,504,120	25,526,194	185,588,242
\$200	2,677	20,691	76,473	226,859	632,296	4,672,160	34,034,926	247,450,990
\$250	3,346	25,864	95,591	283,574	790,370	5,840,200	42,543,657	309,313,737
\$300	4,015	31,036	114,709	340,288	948,444	7,008,241	51,052,388	371,176,485
\$400	5,353	41,382	152,945	453,718	1,264,592	9,344,321	68,069,851	494,901,980
\$500	6,691	51,727	191,182	567,147	1,580,740	11,680,401	85,087,314	618,627,475
\$750	10,037	77,591	286,773	850,721	2,371,110	17,520,601	127,630,971	927,941,212
\$1,000	13,383	103,454	382,364	1,134,295	3,161,479	23,360,802	170,174,628	1,237,254,950
\$1,500	20,074	155,181	573,545	1,701,442	4,742,219	35,041,203	255,261,941	1,855,882,425
\$2,000	26,766	206,908	764,727	2,268,590	6,322,959	46,721,604	340,349,255	2,474,509,900
\$3,000	40,149	310,363	1,147,091	3,402,885	9,484,438	70,082,405	510,523,883	3,711,764,849
\$5,000	66,914	517,271	1,911,818	5,671,475	15,807,397	116,804,009	850,873,138	6,186,274,749
\$10,000	133,829	1,034,542	3,823,636	11,342,949	31,614,794	233,608,018	1,701,746,275	12,372,549,498
\$20,000	267,657	2,069,084	7,647,271	22,685,898	63,229,587	467,216,035	3,403,492,551	24,745,098,995

The Effects of Compound Interest

Write down items that you often spend money on that are **not** required to survive or to operate. [Download and use](#) the **Win Make Give Compounded Value of Optional Expenses Calculator** to figure out how much you'd earn if that money was invested.

1. Daily (Products or services that you buy more than once per week.)

ITEM	FREQUENCY	COST	TOTAL
1. _____	_____	_____	_____

If you deposited those funds in an account and let compound interest do it's thing, what would it be worth in 5 years and 10 years at 10%?

5 yrs = \$ 10 yrs = \$

2. Weekly (Products or services that you buy approximately once a week.)

ITEM	FREQUENCY	COST	TOTAL
1. _____	_____	_____	_____

If you deposited those funds in an account and let compound interest do it's thing, what would it be worth in 5 years and 10 years at 10%?

5 yrs = \$ 10 yrs = \$

3. Monthly (Products or services that you buy monthly or bi-monthly.)

ITEM	FREQUENCY	COST	TOTAL
1. _____	_____	_____	_____

If you deposited those funds in an account and let compound interest do it's thing, what would it be worth in 5 years and 10 years at 10%?

5 yrs = \$ 10 yrs = \$

Food For Thought

- S&P Index average annual return was **9.8%** over the last 90 years.
- The average DJIA annual return with dividends reinvested is around **9.9%** over the last 30 years.
- The average interest rate earned/charged over the last 50 years was **8.21%**.
- Business growth depends on industry, economy, and capital invested. However, growth above **15%** is considered rapid growth.

DISCUSSION QUESTIONS

What ongoing optional expenses do we have that we should invest that money instead?

Where have we spent money that would have been better invested to capitalize on years of compound interest?

If we eliminated a \$50 monthly expense, and invested \$50 each month in an account with a 10% annual return, how much money would we have made in 10 years, 30 years, and 50 years?

What additional money-making job, project, or chore can we do, where instead of spending our earnings, we invest it and watch that money compound year-over-year?

**Get our free Compound Interest Calculator
at WinMakeGive.com/wealth-part-6/**

Compound Interest - Reflection

What is my biggest “aha” moment from this compounding lesson?

Write down how you would explain compound interest to a friend or family member.

Compound interest works both ways. It’s either something you earn or something you pay. Calculate your total cost of interest by looking at your average credit card balance and your average credit card interest rate.

COMPOUND INTEREST



“My wealth has come from a combination of living in America, some lucky genes, and compound interest.”

- Warren Buffett -

Part Six Homework Question

Benjamin Franklin said, “_____ is of a prolific generating nature. _____ can beget _____, and its offspring can beget more _____.”

Save these answers and submit them in the questionnaire at the end of the course for a chance to win a \$10,000 grand prize!

Preparation for Part Seven

- ☐ Get familiar with how a compound interest calculator works. Download and use the [Win Make Give Compound Interest Calculator](#), or the [Compound Interest Calculator on Investor.gov](#).
- ☐ Have your completed net worth tracker handy.
- ☐ Gather up information on your retirement accounts (401K, IRA, etc), stocks and bonds, Social Security benefits, rental income, and any other income you may receive.
- ☐ If you haven't already, please join the discussion on the [Win Make Give Facebook group](#). Post your thoughts, comments, and takeaways from the first six lessons.