

THE Rule OF 72

Abacadabra

It's not a magic trick, it's the mental math shortcut everyone on Earth should know.



A CHAPTER FROM
'HOW MONEY WORKS, STOP BEING A SUCKER'

HOW
MONEY
WORKS

HOW MONEY WORKS[®]

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The Rule of 72

The Rule of 72 is a mental math shortcut—a simple, powerful formula that can be used to quickly approximate the amount of time it takes for money to double, given a fixed annual rate of interest.



Cha-CHING! So this magic formula will help me double my money?

No. But it can help you estimate how many years it will take for your money to double.

What good is that?

And... do I still get a gold star?



As you'll see, it's quite useful.
Sorry, buddy. No gold star.

Basket Case—Every bank’s little inside joke... on you.

What do you find in the little basket on the counter of every bank? You guessed it—suckers. You can’t make this stuff up. It’s like their little inside joke. Delighted that you’ve walked right in not knowing how money works, they offer a free sucker with a smile. Don’t believe it’s intentional? What brand are the suckers? You’re a dumb-dumb if you miss that one.



OK. Total mind freak. But hold on. A moment ago, you told me to leverage the power of compound interest. Savings accounts earn interest. So why would bankers smile when I leave with a sucker? I don’t get it...

In the chapter, The Power of Compound Interest, you learned to leverage compounding—but ALSO that your rate of interest matters. Here’s where that comes into play...

In 2019, the national average interest rate on savings accounts was 0.09%.¹

After you deposit your money into your savings or checking account, what does the bank do with it? They lend it to other customers in the form of loans, like car loans and home mortgages. And what do you think is the national average interest rate on those types of loans? Car loans are over 6%.² Home mortgages are over 4%.³

So let’s do the math. Your money earns you 0.09%. But they use YOUR money to earn 4-6%. Does that seem fair? You get safety. But they get rich. What a deal... for them.

Now you know why they smile, Clark. }

There's almost \$10 trillion stagnating
in savings accounts averaging
only .09% annual interest.⁴



Dude. That's a lot
of dumb-dumbs.



Yeah, but .09% is better than nothing, right?

Legitimate question, TJ. Let's dig a little deeper...

The Rule of 72 attacks the false perception of growth.

Let's break this down. There are three main reasons why people stash so much money in low interest savings accounts. One, they want their money to be safe. Valid reason. Two, they want easy access to their money. Also valid. Three, they think their money is growing.

This third reason is the one that should trigger a red flag. For many, the actual rate of return almost doesn't matter. The fact that the account offers interest at all can fool consumers with the false perception of growth.

The false perception of growth describes the sucker's misconception that their money will one day accrue into something substantial. They don't stop to estimate if the growth rate aligns with their savings goals, because they've never been taught **HOW** to estimate it.

Enter, the Rule of 72. Your gleaming sword that can slash the false perception of growth and help you conquer your savings goals.



Swords are cool.



Yeah, they are.

The Rule of 72 is a mental math shortcut.⁵

It's a simple formula that can be used to approximate the number of years it will take for your money to double. Sound like math? It is. But making music and getting home from Mars also require math, and both of those are pretty great. So stop being a sucker and follow along. (It's really, really easy.) Here's how it works...

Divide 72 by your interest rate. The result is the number of years it will take your money to double.

$$72 \div \text{interest rate} = \text{years to double}$$

That's all there is to it. Congratulations. Now you know the Rule of 72.

Plug in your interest rate to see how many years until your money will double. The shorter the time, the better.

So on my calculator, for a 6% interest rate, I hit 72, then divide by the number 6. That gives me 12 years... it worked!



72 ÷

1% = 72 years to double

3% = 24 years to double

6% = 12 years to double

9% = 8 years to double

12% = 6 years to double

Give the Rule of 72 a try.

Do you have any of the accounts or debts below? Plug in your interest rate to estimate how many years before money doubles—for you... or for someone else.⁵

Accounts (Money doubling for you) Interest Rate Years to Double

Savings/Money Market Account $72 \div$ % =

401(k)/IRA/CD $72 \div$ % =

Indexed Fund $72 \div$ % =

Mutual Fund $72 \div$ % =

Debts (Money doubling against you) Interest Rate Years to Double

Credit Card Debt $72 \div$ % =

Car Loan $72 \div$ % =

Home Mortgage $72 \div$ % =

Student Loan $72 \div$ % =



The question is, whose money is doubling faster, yours... or theirs?

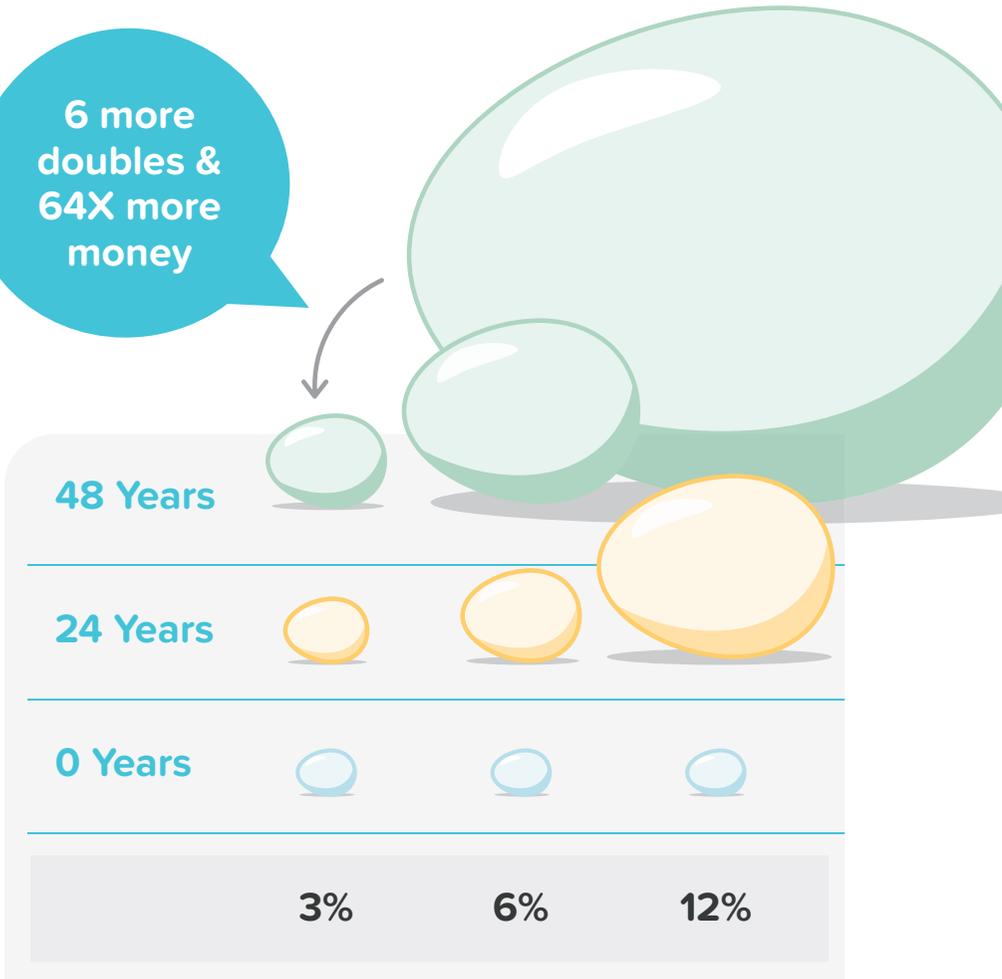


Bingo! Gold star, Clark.

The more time you have, the more “doubles” you get.

Think about your savings for the future. The Rule of 72 can give you an idea of how many doubles you'll get in your lifetime.¹⁹ With more time, a lower interest rate may give you enough to nail your goals. With less time, you may need a higher interest rate.

Look at the nest eggs below. Notice the huge difference in doubles between 3% interest and 12% interest at 48 years of growth.



Every percentage point matters. Every double counts.⁵



I'm 19 and I just received a \$10,000 inheritance. If I wanted to grow it to \$1 million by retirement, how many doubles and what interest rate do I need?

Look below, Zoey. You'd need more than 9% interest and almost 7 doubles to reach \$1 million by age 67.

AGE	1%	3%	6%	9%	12%
19	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
31			\$20,000	\$20,000 \$40,000	\$20,000 \$40,000 \$80,000
43		\$20,000	\$40,000	\$80,000	\$160,000
61			\$80,000	\$160,000 \$320,000	\$320,000 \$640,000 \$1,280,000
67	\$16,000	\$40,000	\$160,000	\$640,000	\$2,560,000
Retirement	<1 double doubles every 72 years	2 doubles doubles every 24 years	4 doubles doubles every 12 years	6 doubles doubles every 8 years	8 doubles doubles every 6 years

The Rule of 72 works the other way too.

Instead of starting with your interest rate to calculate how many years it will take for your money to double, you can go the other way. You can start with the number of years you have left to save to find the interest rate you'll need to reach your savings goals.

In this case, you divide 72 by the number of years you have left to save. The result is the interest rate you need for your money to double within that time frame.¹⁹

$72 \div \text{years left to save} = \text{interest rate needed}$

I have a \$500,000 retirement account and I'm 57 years old. Are you saying that if I want my money to double to \$1 million by retirement, which is 10 years from now, I can divide 72 by 10 to get the interest rate I need?



↳ Precisely, Mei. You'd need a 7.2% rate of return. See below...

$72 \div 10 \text{ years left} = 7.2\% \text{ interest rate needed}$

The national average
interest rate for savings
accounts is .09%.¹

$$72 \div .09\% = 800 \text{ years}$$

800 years!

For reference, 800 years ago the Crusades were underway, Genghis Khan was crowned, and the Magna Carta was signed.

Do you want to wait that long
for your money to double?



Compare that to the national average interest rate for credit cards, which is over 17%.⁶

$$72 \div 17\% = 4.2 \text{ years}$$

4.2 years!

A sucker will wait 800 years for their money to double, while others, like credit card companies, figured out how to get a double every 4.2 years.



That's like battling Genghis Khan's army. It's not a fair fight!

Which is why this knowledge is so critical, Mei. It levels the playing field... or battlefield. }

The Rule of 72 is more than a cool math trick.

It's a practical eye opener that forces you to ask shrewd questions before making important money decisions.

Here are some of the questions you'll be compelled to ask...

Is a bank account the best place to put my money? Am I willing to settle for a 1% or even a 2% rate of return? Or is there a way I can get a 4% or 6% return—or perhaps even higher?

What type of higher interest accounts still provide adequate safety?

Can I finance or refinance my car loan or mortgage with a lower interest rate?

Will the financial institution managing my money earn more interest than I will?

Will I get enough "doubles" during my income-earning years to reach my savings goals for retirement? If not, what do I need to change?

Suckers don't ask these kinds of questions. They're not even really aware that to grow their money—at some point—it has to double!

When you know the Rule of 72, you're less likely to fall for gimmicky promotions from banks, settle for opportunities that don't give you the advantage, and take on debt that might take forever to pay off.

When you know the Rule of 72, you're more likely to pause and run that useful little calculation:

$72 \div \text{interest rate} = \text{years to double}$

Smile back at them.

Now that you know the Rule of 72, you know the deal with banks. But don't get cocky. They're always thinking of slicker ways to get your money and save their costs.

The banking world has gone mobile. In fact, 72% of people in a recent study prefer banking online instead of visiting a local branch.²¹ Deposits are "direct" or done with a couple of taps on an app. It's all about getting your money faster to generate more compound interest than ever before. With online banking, they even found a way to save the cost of the sucker basket.

But now you've got their number.

Next time you visit a bank, skip the free sucker and smile back at them.

Your future is no longer their inside joke.





How the sucker thinks.

"The Rule of 72 sounds like math. Booring!"



How the wealthy think.

"Math rocks! The Rule of 72 is simple,
powerful, and practical."

What have you learned?



The Rule of 72 helps you estimate when your money will _____.

Divide 72 by your _____ to approximate how many years it will take for your money to double.



With low interest checking and savings accounts, it's likely that the _____ is earning more interest with your money than you are.



Clark: double
Zoey: interest rate
TJ: financial institution

Your HOWMONEYWORKS® Money Discovery

Name(s)	DOB	Phone	Annual Income	Bonus
<input type="text"/>				
<input type="text"/>				

Address

Name of dependent(s)	Age	Name of dependent(s)	Age
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Goals

	Short-Term 1-3 Years	Mid-Term 3-7 Years	Long-Term 7+ Years
Build retirement wealth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create guaranteed retirement income	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buy new home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Set up emergency fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fund education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Start a business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Financial Questions

End-of-the-month amount you can allocate to goals <input type="text"/>	Do you want a complimentary analysis of options that could help you maximize Social Security income? Yes <input type="checkbox"/> No <input type="checkbox"/>
Previous year's tax refund <input type="text"/>	Do you have a will and/or a trust? Yes <input type="checkbox"/> No <input type="checkbox"/>
Existing college plans <input type="text"/>	Do you have a long-term care policy? Yes <input type="checkbox"/> No <input type="checkbox"/>
If applicable, what are your parents' plans for long-term care? <input type="text"/>	Do you have a pension? Yes <input type="checkbox"/> No <input type="checkbox"/>

Life Insurance

Insured	Company	Type	Amount	Cash Value	Premium	Year Issued

Assets	Tax Now		Tax Later		Tax Never	
	BALANCE	MONTHLY CONTRIB.	BALANCE	MONTHLY CONTRIB.	BALANCE	MONTHLY CONTRIB.
MUTUAL FUNDS					ROTH IRA	
BROK. ACCTS. / STOCKS / BONDS			ANNUITIES (FIXED / VARIABLE)			
CHECKING / SAVINGS / CD'S			TRAD. IRA / SEP IRA		CASH VALUE LIFE INSURANCE	
			401(K) / 403(B) / OTHER QUAL. PLAN		EMPLOYER MATCH	

Other

Any other assets or expenses to consider? (expected inheritances, child w/ special needs, etc.)

The Money Discovery Form, developed by HowMoneyWorks, is based on the accuracy and completeness of the information provided by the client. The analysis uses sources that are believed to be reliable and accurate, although they are not guaranteed. Discuss any legal, tax or financial matter with the appropriate professional. Neither the information presented nor any opinion expressed constitutes solicitation for the purchase or sale of any specific product or financial service. HowMoneyWorks does not offer tax and/or legal advice. Please consult with your personal tax and/or legal professional for further guidance.

Behind the Creative



Andy Horner

Andy is the CEO of Outstand, a hybrid software and creative services company. He and his team have helped clients build their brand, tell their story, and serve their clients with world-class design and digital tools for over 12 years. Andy is a graduate of Virginia Commonwealth University, where he studied Communication Arts and Design. Before starting his own company, he led creative at a variety of ad agencies and web design studios. Today, Outstand offers a wide range of software and creative services, from marketing campaign management and brand development to web design and video production. A storyteller at heart, Andy develops a series of graphic novels for teens in his spare time. He lives in Atlanta, Georgia with his wife, Tonia, and their 4 sons.

About the Authors



Tom Mathews

Tom is a 38-year veteran and co-founder of one of the largest financial services organizations in North America. He's been a champion for middle-income families, helping them access financial services and education that had been predominantly available only to the wealthy. Tom has made a career of bringing high-tech to high-touch. From starting one of the first financial industry websites and making laptop computers mainstream in 1993, to podcasts and streaming television shows today, he has always been a pioneer. A native of Cincinnati, Ohio, Tom has a degree in Accounting from Xavier University and is the author of "Aim For The Heart, Leading to Build Great Teams." He now resides in Atlanta, Georgia and oversees 450 offices with a team of over 8,000 financial professionals. An accomplished trumpet player and music aficionado, Tom and his wife, Cindy, have two daughters and one granddaughter.⁴⁸



Steve Siebold

Steve is the author of "How Rich People Think," "Secrets Self-Made Millionaires Teach Their Kids," and "Get Tough/Retire Rich." Since 1984, Steve has interviewed over 1,300 self-made millionaires around the world, which has been recognized as the largest study ever conducted of the self-made rich. Steve has been a featured guest on The Today Show, Good Morning America, CNBC, Fox News Channel, and hundreds of other television shows, websites and publications across the world. His concepts and writings are cited in top online publications throughout the web each week. His books have sold over 1.2 million copies and have been translated into 6 languages. A guitarist—and collector of guitars—Steve is a native of Chicago, Illinois, and now resides in Atlanta, Georgia with his wife, Dawn.

Resources and Disclosures

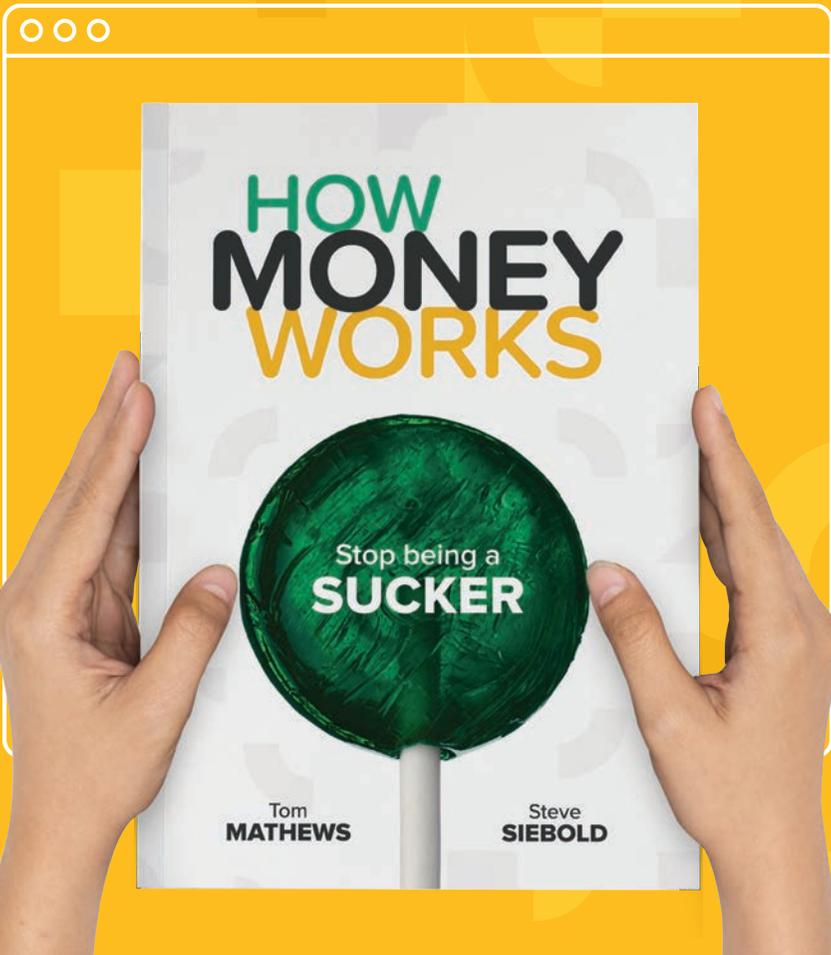
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3. "Mortgage rates tumble as one economist waves the white flag," Andrea Riquier, MarketWatch, May 2019, marketwatch.com/story/mortgage-rates-tumble-as-one-economist-waves-the-white-flag-2019-05-02
4. Savings Deposits (including money market deposit accounts) \$9.5 Trillion as of Aug 5, 2019, Table 4, federalreserve.gov/releases/h6/current/
5. The Rule of 72 is a mathematical concept that approximates the number of years it will take to double the principal at a constant rate of return compounded over time. All figures are for illustrative purposes only, and do not reflect the performance risks, fees, expenses or taxes associated with an actual investment. If these costs were reflected, the amounts shown would be lower and the time to double would be longer. The rate of return of investments fluctuates over time and, as a result, the actual time it will take an investment to double in value cannot be predicted with any certainty. Investing entails risk, including possible loss of principal. Results are rounded for illustrative purposes. Actual results in each case are slightly higher or lower.
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Explore more resources to advance your education and discover how you can share financial literacy with all the suckers you know and love.





➤ CONTACT YOUR FINANCIAL EDUCATOR
TO GET A COPY OF THE BOOK.

Stop being a sucker. Start being a student.

Financial illiteracy is the #1 economic crisis in the world, impacting more than 5 billion people across the planet. The few who know how money works take advantage of those who do not—the suckers. This book is designed to help you break the cycle of endless debt, foolish spending, and financial cluelessness so you can stop being a sucker, start being a student, and take control of your financial future.

This book shows how anyone can become financially independent. It's sophisticated enough for adults yet simple enough for teens. **HowMoneyWorks** belongs in every home and every school as a starting point for financial literacy.

BOB PROCTOR

Speaker, Author, Coach & Mentor

Financial literacy is a step-by-step process. The Money Milestones in **HowMoneyWorks** are the most intuitive, least intimidating format I have ever seen to take someone from sucker to success with their money.

BILL MITCHELL

Financial Industry Leader & Mentor

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KIM SCOULLER

Attorney & Former Broker-Dealer President

If you want to win, you have to know your opponents and how the game is played. **HowMoneyWorks** is the financial half-time pep talk you need to hear right now to change your financial scoreboard and the outcome of your life.

MARSHALL FAULK

NFL MVP, Hall of Fame & Super Bowl Champion

HowMoneyWorks hits at the very heart of what's frustrating most Americans today. We have reached a financial crisis in this country. This book provides a fun and insightful way to begin the process of achieving financial wellness!

ALAN GAPPINGER

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