## Rule of 72

This is a formula used to determine the number of years it will take for a debt or investment to double in value: 72 divided by the interest rate equals the number of years to double the value.

$$
72 \div \text { rate of return = years to DOUBLE your money }
$$

Example: \$100,000 premium starting at age 35 at $5 \%$ annual interest rate, 28\% tax bracket

| Taxable | Tax-deferred |
| :---: | :---: |
| $\$ 100,000$ premium at $28 \%$ tax rate | $\$ 100,000$ premium at $0 \%$ tax rate |
| $28 \%$ tax on $5 \%=3.6 \%$ net return | $0 \%$ tax on $5 \%=5 \%$ net return |
| $72 \div 3.6 \%=20$ years to double | $72 \div 5 \%=14$ years to double |


| Account value | At age | Annuity value | At age |
| :---: | :---: | :---: | :---: |
| $\$ 100,000$ | 35 | $\$ 100,000$ | 35 |
| $\$ 200,000$ | 55 | $\$ 200,000$ | 49 |
| $\$ 400,000$ | 75 | $\$ 400,000$ | 63 |
|  |  | $\$ 800,000$ | 77 |

When you are ready to take a payout, at least two different options may be available:
1.) Take interest income: (The interest is considered taxable gain and will be taxed according to your tax bracket.)

| Interest income from \$400,000 |  | Interest income from \$800,000 |  |
| ---: | :--- | ---: | :--- |
| $\$ 20,000$ | Annual interest payment | $\$ 40,000$ | Annual interest payment |
| $\$ 20,000$ | Taxable gain | $\$ 40,000$ | Taxable gain |
| $(\$ 5,600)$ | Taxes at $28 \%$ | $(\$ 11,200)$ | Taxes at $28 \%$ |
| $\mathbf{= \$ 1 4 , 0 0 0}$ | After-tax annual income | $\mathbf{= \$ 2 8 , 8 0 0}$ | After-tax annual income |

2.) Take a lump-sum payout:
\$400,000 (tax already paid)
\$400,000
\$800,000 less \$100,000 cost basis

$$
=\$ 700,000 \text { gain }
$$

$\$ 555,000$ after tax (35\% tax bracket)

Hypothetical example assumes a constant 5\% rate of return, which is not guaranteed and is not intended to represent the actual projected future interest rate.

## The Power of Tax - Deferral

This table lists a series of rates for tax-deferred alternatives alongside the rates needed for a bank CD (or other taxable savings product) to generate equivalent net earnings. Unless a CD is an IRA, the CD interest is taxable even if it is left on deposit with the bank.

Table of Equivalent after Tax Yields

| Equivalent for <br> Tax-Deferred <br> Alternative | Equivalent <br> CD Rate <br> 28\% Tax Bracket |
| :---: | :---: |
| $3.00 \%$ | $4.17 \%$ |
| $3.25 \%$ | $4.51 \%$ |
| $3.50 \%$ | $4.86 \%$ |
| $3.75 \%$ | $5.21 \%$ |
| $4.00 \%$ | $5.56 \%$ |
| $4.25 \%$ | $5.90 \%$ |
| $4.50 \%$ | $6.25 \%$ |
| $5.00 \%$ | $6.94 \%$ |
| $5.50 \%$ | $7.64 \%$ |
| $6.00 \%$ | $8.33 \%$ |

