## The Rule of 72 and the Rule of 115

## How Long Will It Take to Double or Triple an Investment?<sup>1</sup>

The rule of 72 is a handy mathematical rule that helps in estimating approximately how many years it will take for an investment to **double** in value at a specified rate of return.

Rule of 72: If 72 is divided by an interest rate, the result is the approximate number of years needed to double the investment. For example, at a 1% rate of return, an investment will double in approximately 72 years; at a 10% rate of return it will take only 7.2 years, etc.

The rule of 115 is similar in that it estimates how long it takes an investment to triple in value.

Rule of 115: If 115 is divided by an interest rate, the result is the approximate number of years needed to triple an investment. For example, at a 1% rate of return, an investment will triple in approximately 115 years; at a 10% rate of return it will take only 11.5 years, etc.

| Rate of<br>Return | 1%  | 2%   | 3%   | 4%   | 5%   | 6%   | 7%   | 8%   | 9%   | 10%  | 11%  |
|-------------------|-----|------|------|------|------|------|------|------|------|------|------|
| Years to double   | 72  | 36   | 24   | 18   | 14.4 | 12   | 10.3 | 9    | 8    | 7.2  | 6.5  |
| Years to triple   | 115 | 57.5 | 38.3 | 28.8 | 23   | 19.2 | 16.4 | 14.4 | 12.8 | 11.5 | 10.5 |
|                   |     |      |      |      |      |      |      |      |      |      |      |
| Rate of<br>Return | 12% | 13%  | 14%  | 15%  | 16%  | 17%  | 18%  | 19%  | 20%  | 21%  | 22%  |
| Years to double   | 6   | 5.5  | 5.1  | 4.8  | 4.5  | 4.2  | 4    | 3.8  | 3.6  | 3.4  | 3.3  |
| Years to triple   | 9.6 | 8.8  | 8.2  | 7.7  | 7.2  | 6.8  | 6.4  | 6.1  | 5.8  | 5.5  | 5.2  |

These rules can also tell you how long before a given item will double or triple in price at an estimated average rate of inflation.

For example, at an estimated average inflation rate of 8%, a loaf of bread will double in price every nine years.  $(72 \div 8 = 9)$ .

The examples discussed here are hypothetical illustrations, shown for informational purposes only. They are not intended to represent any specific investment.

<sup>&</sup>lt;sup>1</sup> Investing involves risk, including the possible loss of principal.

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