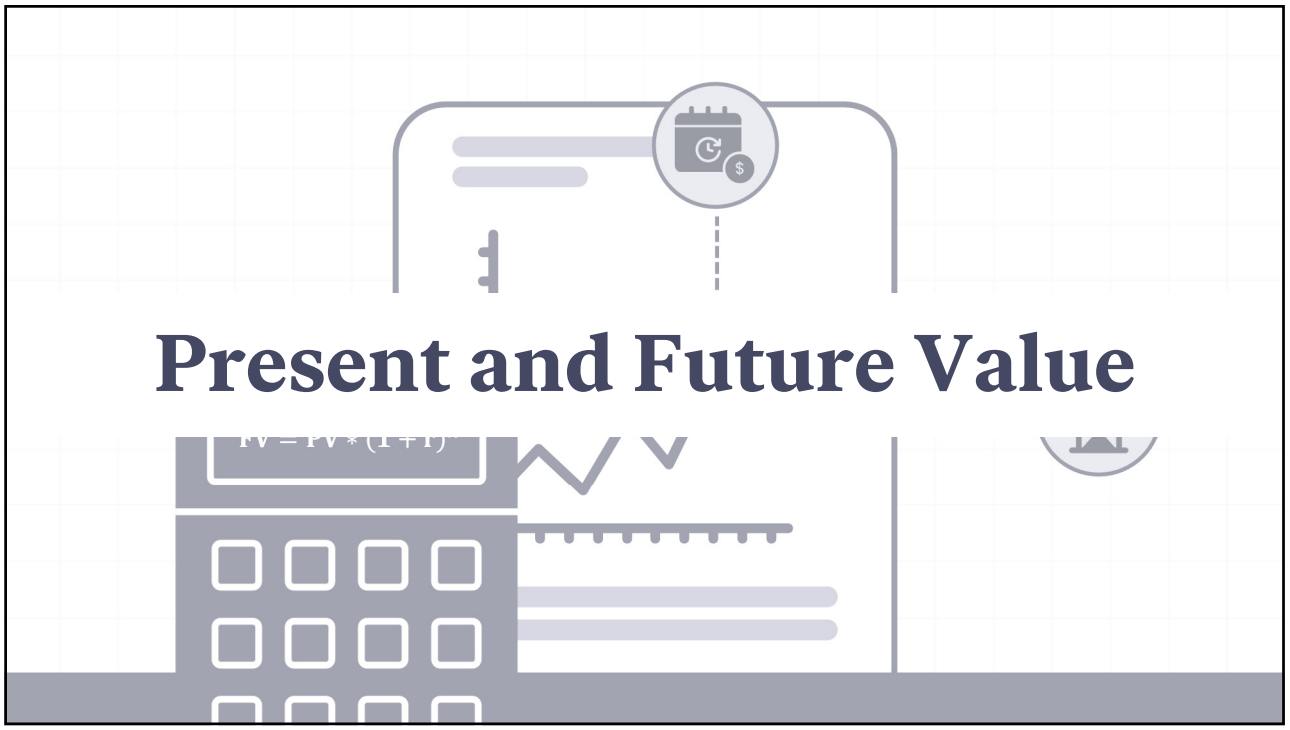


Present Value

One simple equation

Application

Start with some kind of cash flow in the future

FV

FINANCIALEDGE

Present Value

One simple equation

Application

How far into the future?

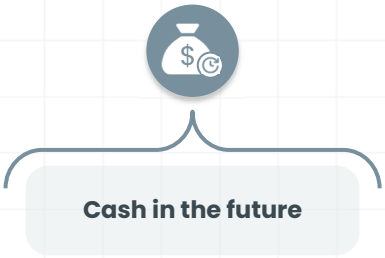
n = years

FV

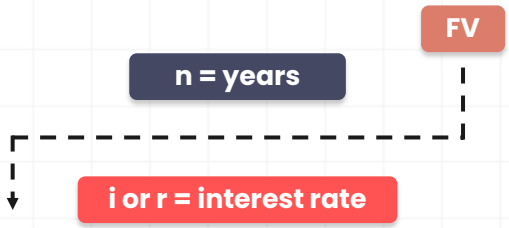
FINANCIALEDGE

Present Value

One simple equation



Application



FINANCIALEDGE

Present Value

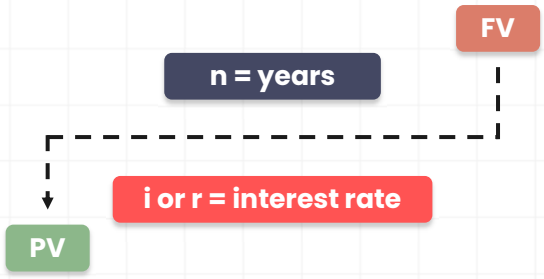
One simple equation

Simple equation to **calculate present value**:

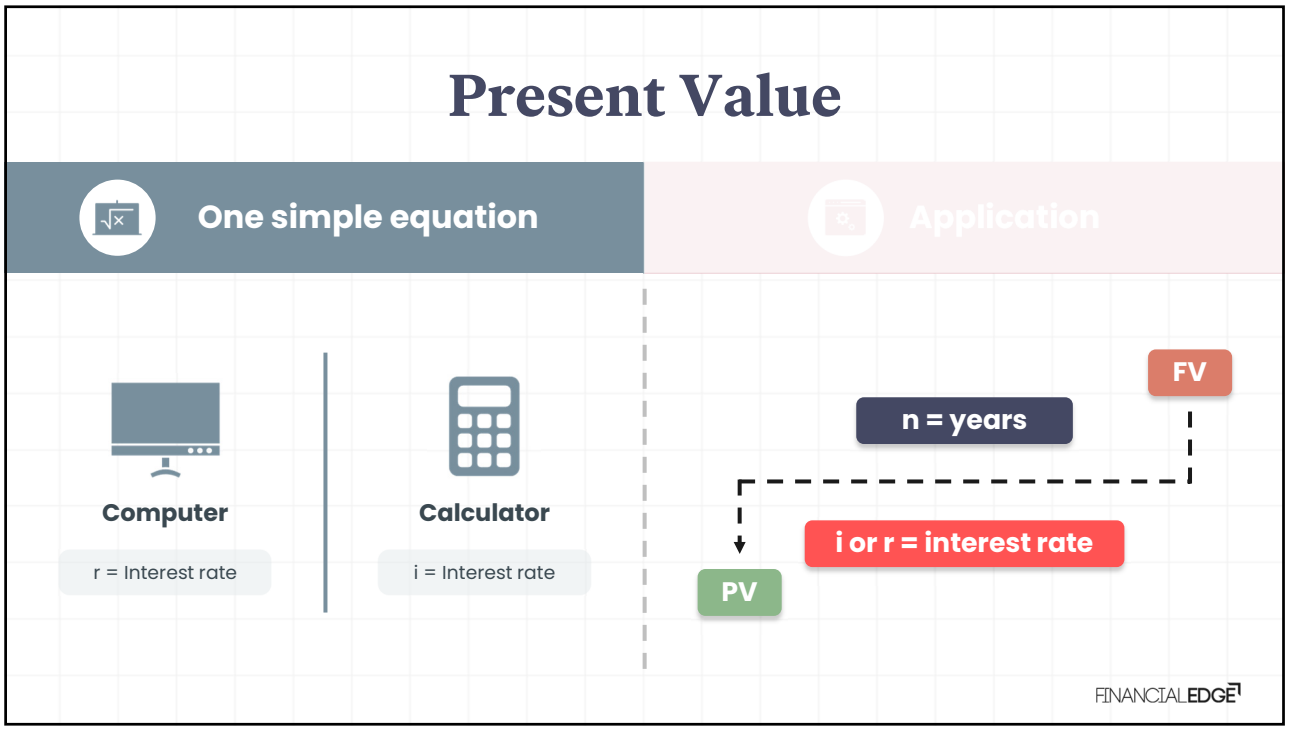
$$PV = FV * \frac{1}{(1 + r)^n}$$

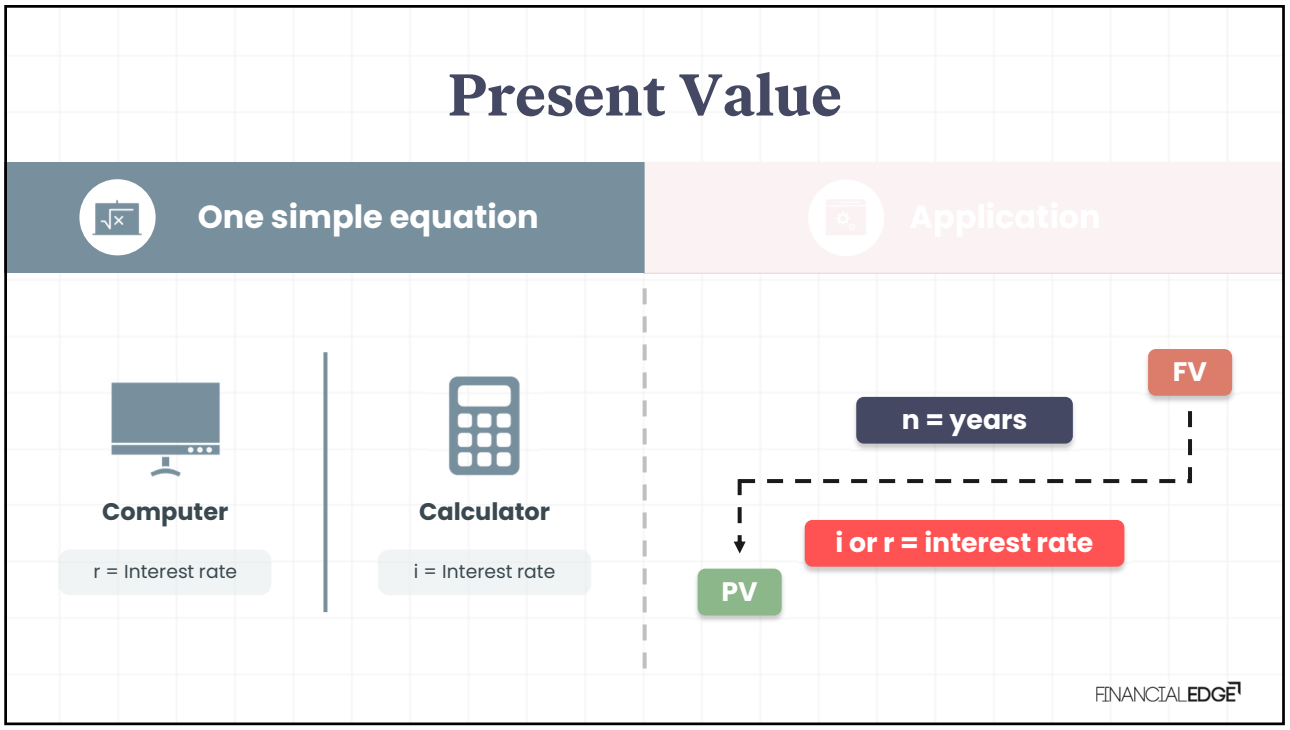
In excel, use the **PV function**

Application



FINANCIALEDGE

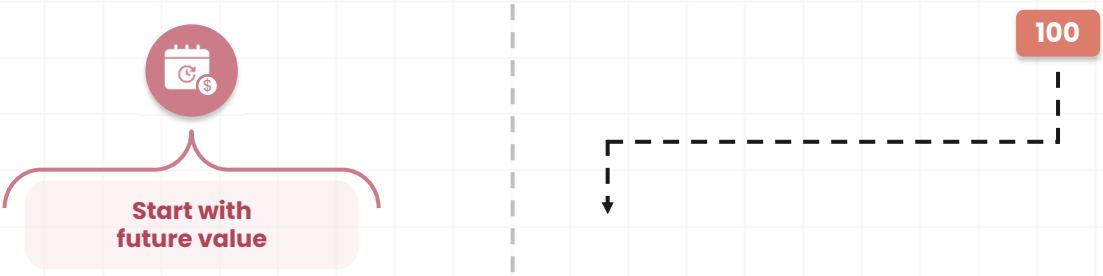




Present Value

One simple equation | Application

How much should be **invested now** at **8%** to get **100** in **ten years time**?



FINANCIALEDGE

Present Value

One simple equation | Application

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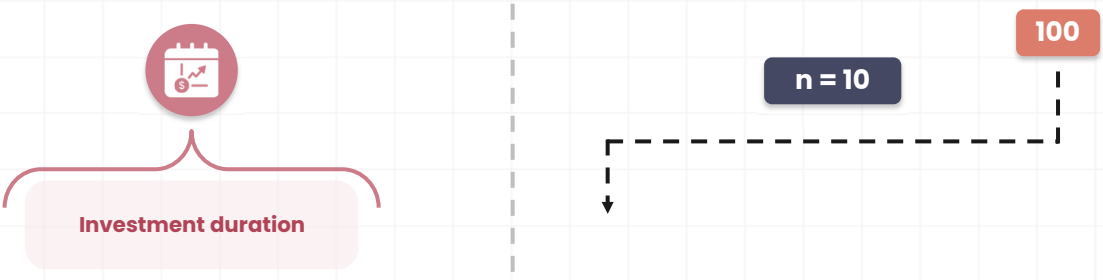


FINANCIALEDGE

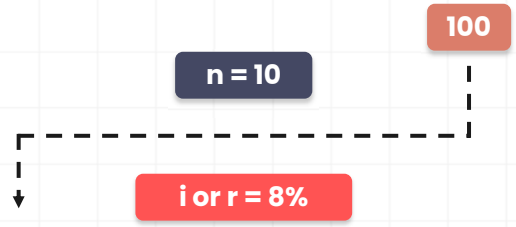
Present Value

One simple equation | Application

How much should be **invested now** at **8%** to get **100** in **ten years time**?

What's the **interest rate**?

i or r



FINANCIALEDGE

Present Value

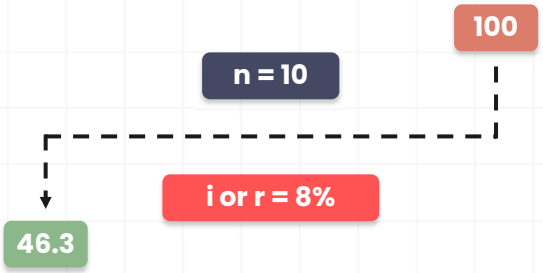
One simple equation | Application

How much should be **invested now** at **8%** to get **100** in **ten years time**?

Equation:

$$PV = 100 * \frac{1}{(1 + 8\%)^{10}}$$

In excel =**PV(0.08,10,0,100)**



FINANCIALEDGE

Present Value

One simple equation | Application

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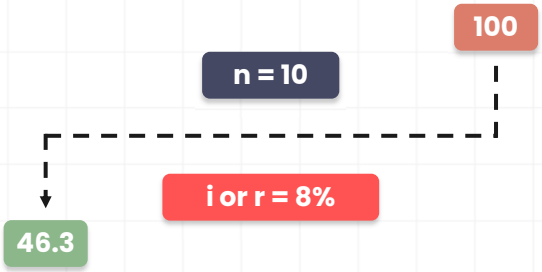

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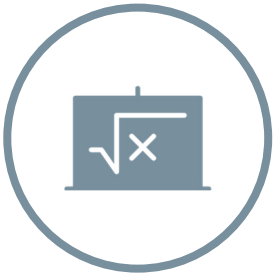
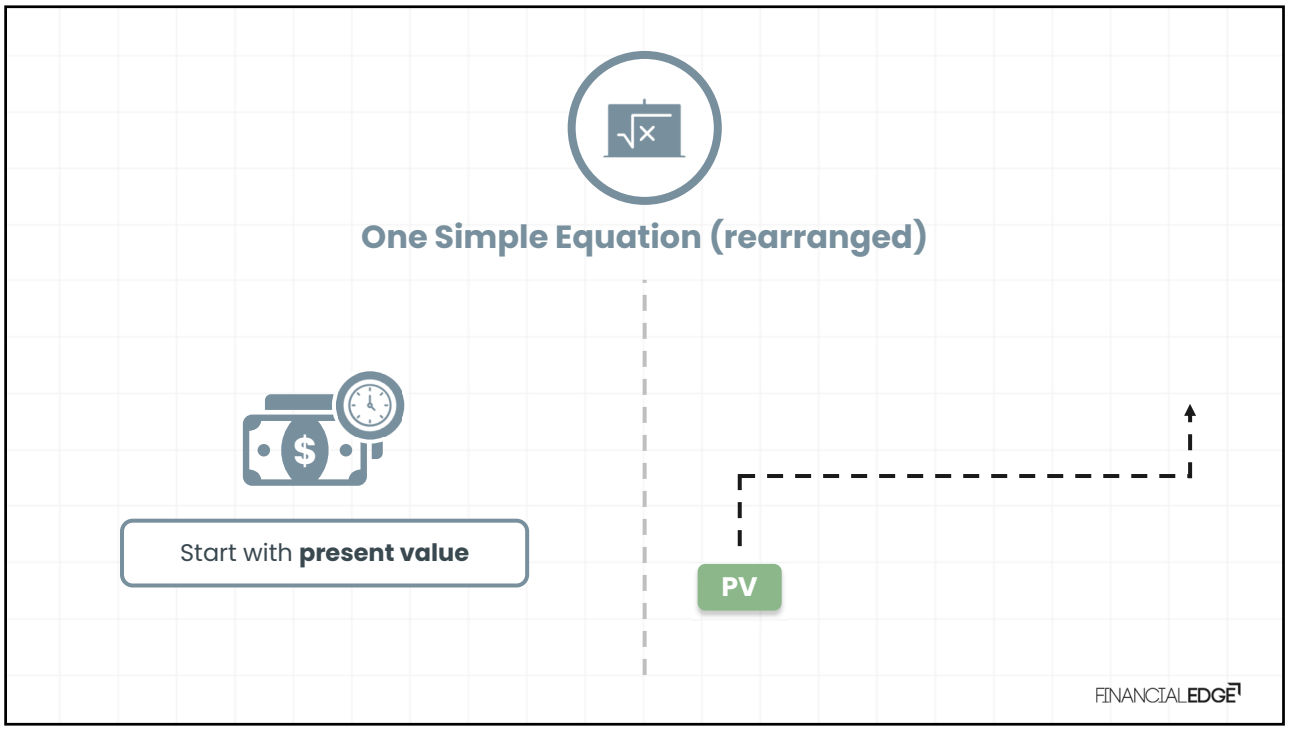
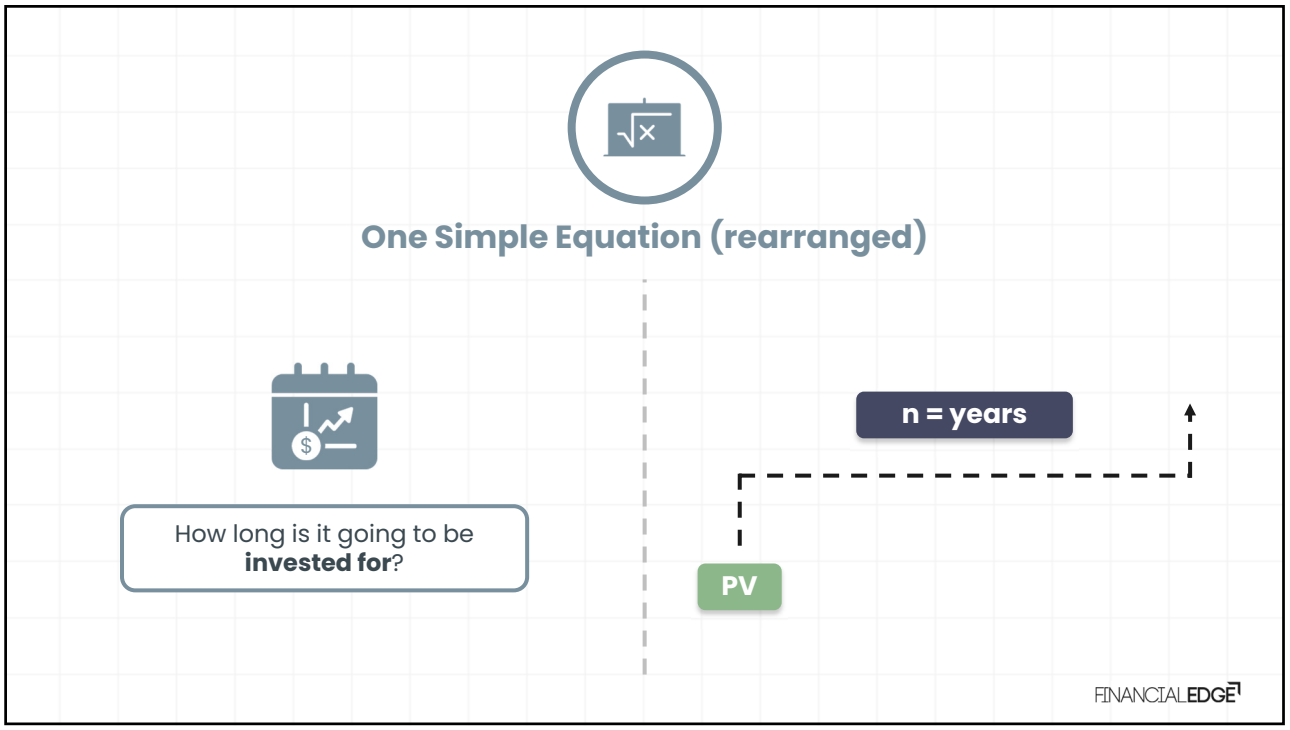
Future Value



FINANCIALEDGE





One Simple Equation (rearranged)

What **interest rate** or **rate of return**?

FV

n = years

i or r = interest rate

PV

FINANCIALEDGE

One Simple Equation (rearranged)

Equation:

$$FV = PV * (1 + r)^{n}$$

In excel, use the **FV function**

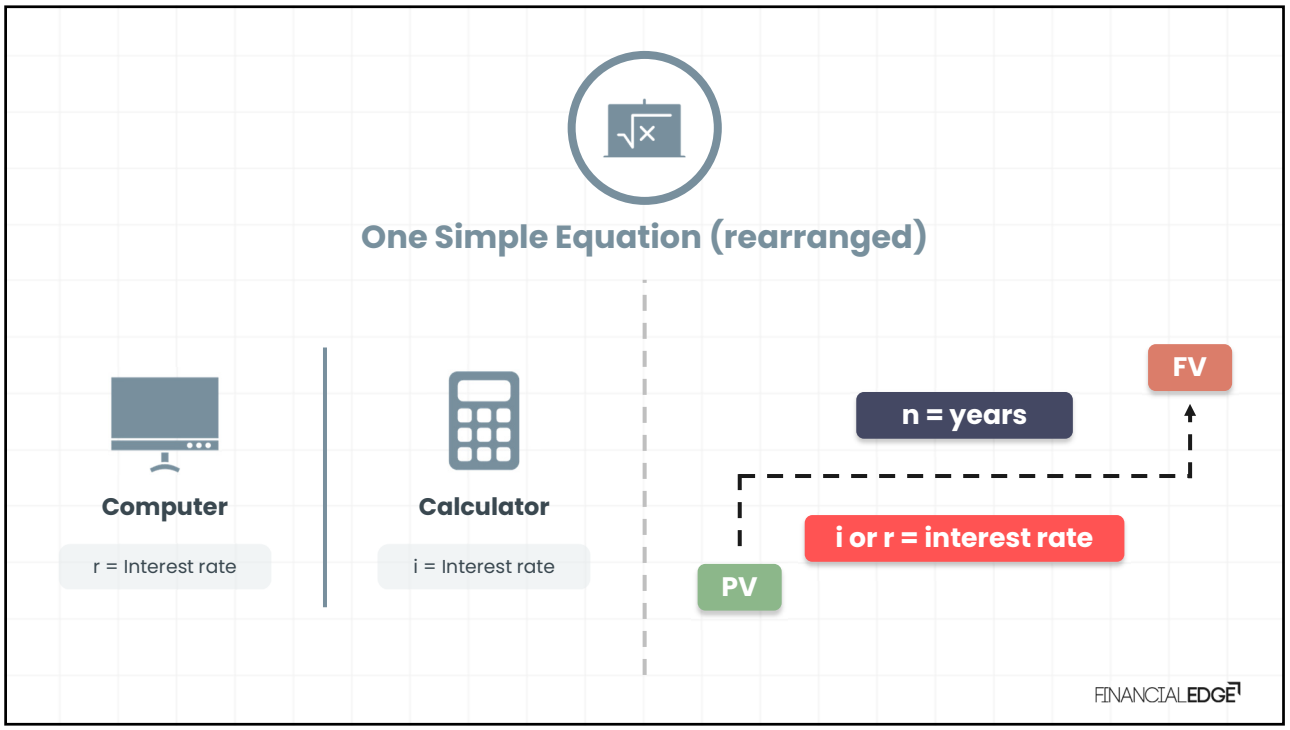
FV

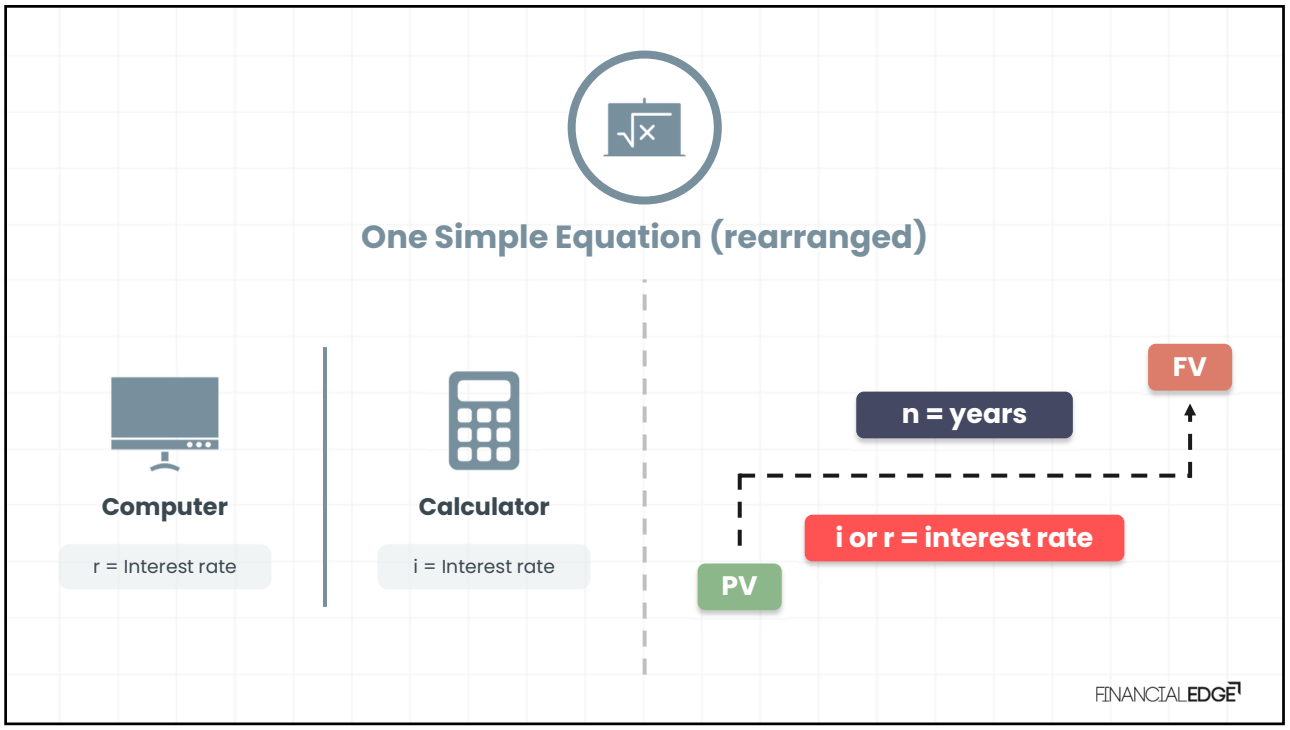
n = years

i or r = interest rate

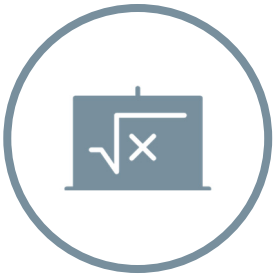
PV

FINANCIALEDGE





Future Value



FINANCIALEDGE

Application

If **100** is **invested** now at **8%** how much will it be worth in **10 years time**?

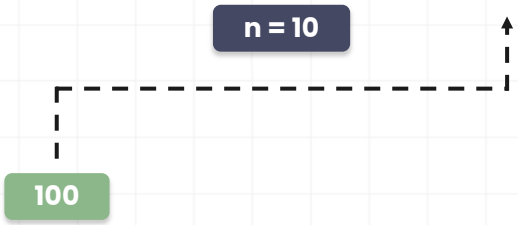
Start with **present value**

FINANCIALEDGE

Application

If **100** is **invested** now at **8%** how much will it be worth in **10 years time**?

It's going to be invested for **10 years**

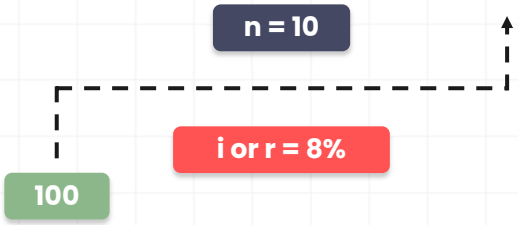


FINANCIALEDGE

Application

If **100** is **invested** now at **8%** how much will it be worth in **10 years time**?

What **interest rate** or **rate of return**?



FINANCIALEDGE

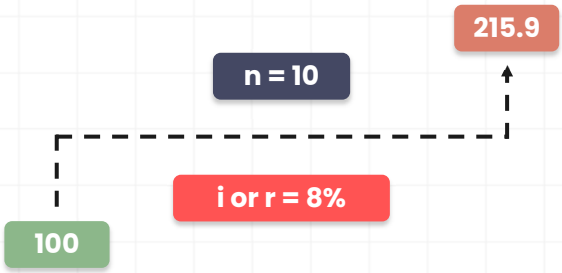
Application

If **100** is **invested** now at **8%** how much will it be worth in **10 years time**?

Equation:

$$FV = 100 * (1 + 8\%)^{10}$$

In excel =**FV(0.08,10,0,100)**



FINANCIALEDGE

Application

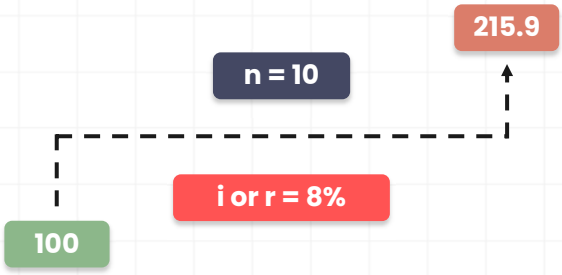
If **100** is **invested** now at **8%** how much will it be worth in **10 years time**?

Computer

- FV = Future value
- PV = Present value
- r = Interest rate
- N = Number of years

Calculator

- 100 = PV
- 8 = i
- 10 = n
- FV Enter = 215.9



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