Date: _____

Learning Goal

The Compound Interest Formula

$$FV = PV(1 + i)^n$$

To solve for the future value of an investment

1. Identify the value of _____.

2. Determine the value of _____.

3. Determine the value of _____.

4. Plug _____, _____ and _____ into the equation.

5. _____ 1 and _____ together.

6. Take _____ to the _____ _____.

7. _____ the result by _____.

$$FV = PV(1 + i)^n$$

To determine the value of **i**

divide the interest rate by the number of compounding periods in a year

To determine the value of ***n***

multiply the number of compounding periods in a year by the number of years the money is invested

Example: What is your investment worth if you invested $5,000 at 2.5% interest compounded monthly for 5 years.

$$FV = PV(1 + i)^n$$

P =

i =

n =

Example: What is your investment worth if you invested $55,000 at 0.95% interest compounded weekly for 5 years.

$$FV = PV(1 + i)^n$$

P =

i =

n =

Example: What is your investment worth if you invested $2,500 at 7% interest compounded daily for 8 years.

$$FV = PV(1 + i)^n$$

P =

i =

n =

Example: What is the value of your investment if you invested $12,000 at 10% interest compounded bi-weekly for 9 months.

$$FV = PV(1 + i)^n$$

P =

i =

n =

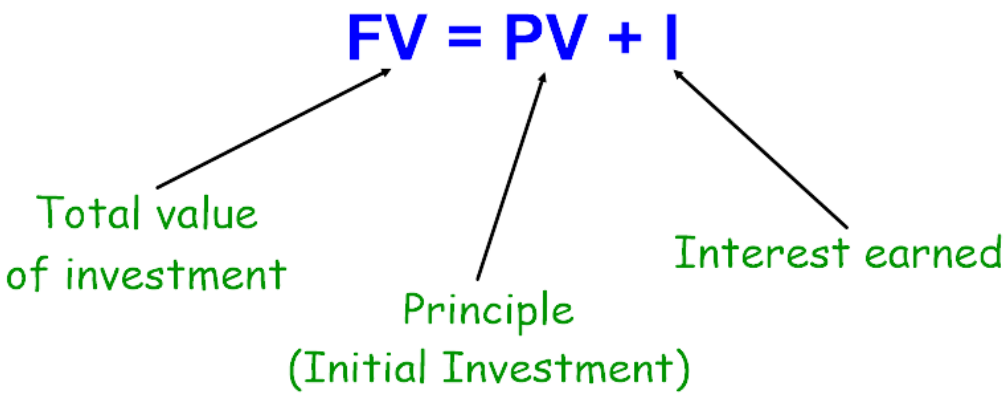
What's the Difference?

You make a $20,000 investment at 4.5% interest compounded _____ for 5 years.

How much is the investment worth at the end of the term?

Schedule	Compounding Periods	Value of Investment
Daily		
Weekly		
Bi-Weekly		
Semi-Monthly		
Monthly		
Quarterly		
Semi-Annually		
Annually		

New Formulas?



$I =$

A New Formula?

You decide to invest $_____

for _____ years at _____% interest

compounded _____.

How much interest will you earn on the investment?

A New Formula?

You decide to invest $_____

for _____ years at _____% interest

compounded _____.

How much interest will you earn on the investment?

Exit Question

You decide to invest $15,000 for 18 months at 9% interest compounded bi-weekly.

How much interest will you earn on the investment?