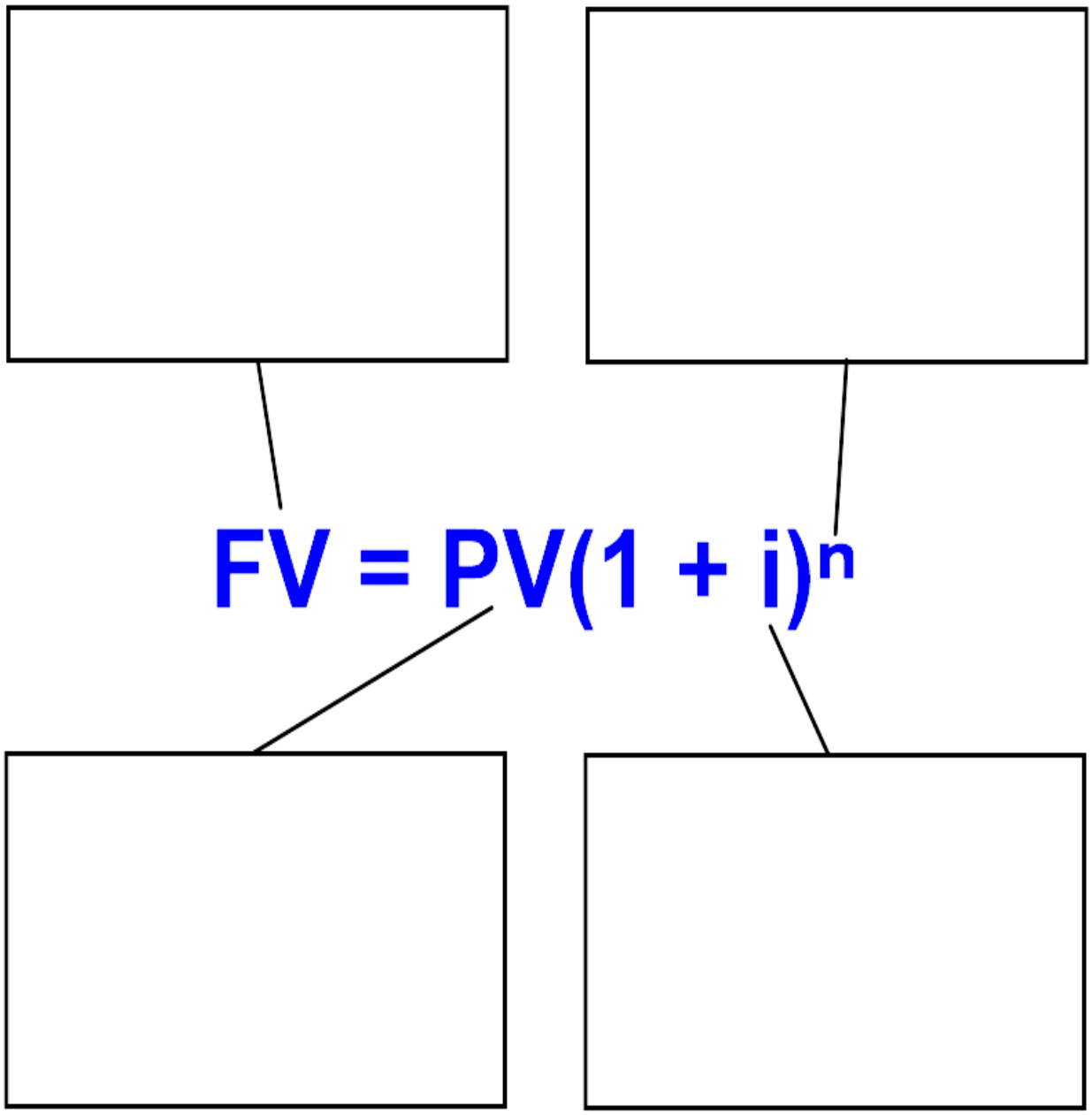
Date: _____

Learning Goal

The Compound Interest Formula



The Compound Interest Formula

Compound interest is calculated at

_____ _____

_____.

There are _____ different periods.

(these periods help determine the ***i*** and the ***n*** in the compound interest equation)

Daily
Weekly
Bi-Weekly
Monthly
Semi-monthly
Annually
Semi-annually
Quarterly

Interest Schedules

How many times does each schedule occur in one year?

Daily

Weekly

Bi-Weekly

Monthly

Semi-monthly

Annually

Semi-annually

Quarterly

Minding Your **i's** and n's

To determine the value of **i**:

_____ the _____ _____

as a _____ by the number of

_____ periods in a _____.

Example: If you invested $2,500 at 3% interest compounded weekly for 3 years.

i = _____ ÷ _____

Interest Rate **as a decimal**

Number of **times** interest is compounded **per year**.

Minding Your **i's** and n's

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

i = _____ ÷ _____

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

i = _____ ÷ _____

Minding Your **i's** and n's

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

i = _____ ÷ _____

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

i = _____ ÷ _____

Minding Your i's and **n's**

To determine the value of n:

_____ the number of _____

periods in a _____ by the number of

_____ the money is invested.

Example: If you invested $2,500 at 3% interest compounded weekly for 3 years.

n = _____ X _____

Number of **times** interest is compounded **per year**.

Number of **years** money will be invested

Minding Your i's and **n's**

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

n = _____ x _____

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

n = _____ x _____

Minding Your i's and **n's**

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

n = _____ x _____

Example: If you invested $_____ at _____%

interest compounded _____ for _____ years.

n = _____ x _____

Solving for Future Value

If you invested $_____ at _____%

interest compounded _____

for _____ years how much would your

investment be worth?

PV =

i =

n =

Solving for Future Value

If you invested $_____ at _____%

interest compounded _____

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Solving for Future Value

If you invested $_____ at _____%

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for _____ years how much would your

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PV =

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n =

Exit Question

You decide to invest $5,000 for 3.5 years at 2.5% interest
compounded monthly.

Identify the value of each variable in the compound
interest formula, then determine the final value of the investment.

PV =

i =

n =