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DEPARTMENT OF EDUCATION

General Mathematics
Quarter 2 – Module 9:
Different Markets
for Stocks and Bonds

ALTERNATIVE DELIVERY MODE
IADM

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Quarter 2 – Module 9: Stocks and Bonds
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Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.

What I Need to Know

Have you ever heard stocks and bonds? Have you ever experienced to borrow money from your parent or friend and had to pay it back with interest?

This module was designed and written for learners like you to describe how stocks and bonds work. This lesson will also prepare you to be financially independent and succeed in the near future.

In this topic, learners are expected to demonstrate understanding of basic concepts of stocks and bonds. Learners should also be able to use appropriate financial instruments involving stocks and bonds in formulating conclusions and making decisions. After going through this module, you are expected to:

1. solve problems involving stock valuation,
2. solve for the face value and redemption value of bonds, and
3. solve for the bond premium and discount on bonds.
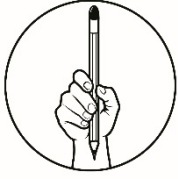
What I Know

Choose the letter of the best answer. Write the chosen letter on a separate sheet of paper.

1. The interest rate the bond issuer will use in computing the interest payment which is usually expressed in percent.
   a. Coupon rate
   b. Dividend
   c. Dividend Rate
   d. Maturity Date

2. The ratio of the annual dividend per share and the market value per share.
   a. Coupon Amount
   b. Dividend Rate
   c. Market Value
   d. Stock yield ratio

3. The periodic interest payment that the bondholder receives during the time between the purchase date and maturity date.
   a. Coupon Amount
   b. Coupon Rate
   c. Face Value
   d. Market Value

4. The rate per coupon payment period; denoted by r.
   a. Coupon Amount
   b. Coupon Rate
   c. Face Value
   d. Market Value

5. A certain financial institution declared a ₱ 30,000,000.00 dividend for the common stocks. If there is a total of 700,000.00 shares of common stocks, how much is the dividend per share?
   a. ₱ 42.86
   b. ₱ 52.86
   c. ₱ 62.86
   d. ₱ 72.86

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6. A certain corporation declared a 3% dividend on a stock with a par value of ₱500.00 Mrs. Lingan owns 200 shares of stocks with a par value of ₱ 500.00 How much is the dividend she received?
    a. ₱ 2000.00
    b. ₱ 2500.00
    c. ₱ 3000.00
    d. ₱ 3500.00

For numbers 7,8 and 9.

Corporation A, with a current market value of ₱ 52.00, give a dividend of ₱8 per share of its common stock. Corporation B, with a current market value of ₱ 95.00, give a dividend of ₱ 12.00 per share.

7. Find the stock yield ratio for Corporation A.
    a. 12.38%
    b. 13.38%
    c. 14.38%
    d. 15.38%

8. What is the stock yield ratio for Corporation B?
    a. 11.63%
    b. 12.63%
    c. 13.63%
    d. 14.63%

9. In which corporation will you invest your money? Why?
    a. Corporation A, because each peso will earn you more if you invest in A than in B.
    b. Corporation A, the lower the share the higher the stock yield ratio.
    c. Corporation B, because each peso will earn you more if you invest in B than in A.
    d. Corporation B, the lower the stock yield ratio the more you earn.

10. Determine the amount of the semi-annual coupon for a bond with a face value of ₱ 300,000.00 that pays 10% payable semi-annual for its coupon.
    a. ₱ 12,500.00
    b. ₱ 15,000.00
    c. ₱ 17,500.00
    d. ₱ 20,000.00

For numbers 11, 12 and 13.

Suppose that a bond has a face value of ₱ 100,000.00 and its maturity date is 10 years from now. The coupon rate is 5% payable semi-annually. Assuming that the annual market rate is 4%.

11. Find the amount of the semi-annual coupon.
   a. ₱ 2500.00
   b. ₱ 2750.00
   c. ₱ 3000.00
   d. ₱ 3250.00

12. Find the present value of ₱ 100,000.00
   a. ₱ 67,556.42
   b. ₱ 62,452.81
   c. ₱ 57,332.21
   d. ₱ 52,112.54

13. Find the fair price of the given bond.
   a. ₱ 102,445.12
   b. ₱ 104,182.56
   c. ₱ 106,912.89
   d. ₱108, 512.43

14. A bank declared a dividend of ₱ 27.00 per share for the common stock. If the common stock closes at ₱ 93.00, how large is the stock yield ratio on this investment between purchase date and the maturity date?
   a. 0.26
   b. 0.29
   c. 0.32
   d. 0.35

15. Determine the amount of semi-annual coupon paid for a 3% bond with a face value of ₱ 100,000.00 which matures after 8 years. How many coupons are paid?
   a. 10 times
   b. 13 times
   c. 16 times
   d. 19 times

Different Markets for Stocks and Bonds

Many of us deal with stocks and bonds (or want to!) but have no idea what are their worth. Maybe you want to try investing. You may want a better understanding of your investments. Or, if you work for a big corporation, your employer may sell shares, and you need to determine whether it's worth the price. Either way, it is good to know the difference between stocks and bonds and have a basic understanding of how they are valued.

What's In

It's Puzzle Time!

Good day learners. Before we start our new learning experience today, let us have an activity. There are 10 words from the puzzle hidden vertically, horizontally and diagonally. Write the words below using the clue then give a meaningful definition for each word.

A	T	O	W	G	L	V	O	T	O	L	E	I	M	E	Q
I	F	I	S	S	U	E	R	X	G	I	H	K	A	U	D
D	F	A	E	S	T	B	D	B	W	I	O	G	R	A	O
I	G	I	S	O	U	O	R	K	R	E	A	H	K	I	N
S	M	C	T	A	Z	N	C	A	S	C	J	R	E	C	I
C	V	L	O	I	H	F	I	K	D	A	U	P	T	X	R
O	I	H	C	M	L	K	M	I	B	P	N	Q	V	E	M
U	E	Q	K	S	M	B	V	L	R	R	Y	E	A	U	L
N	H	K	E	A	W	I	F	J	F	L	O	U	L	L	D
T	S	E	O	A	D	O	S	V	Z	O	T	K	U	A	O
Y	C	H	Y	E	P	R	I	I	W	P	O	C	E	V	A
O	B	C	N	I	K	D	C	B	O	S	I	H	O	R	R
Q	A	D	U	R	D	E	O	B	O	N	D	A	M	A	A
E	C	O	U	P	O	N	R	A	T	E	U	E	J	P	N
U	Z	J	A	O	G	W	T	A	X	I	V	F	O	L	E

1. S   = _____.

2. B   = _____.

3. C   = _____.

4. M   = _____.

5. P   = _____.

6. I   = _____.

7. C   = _____.

8. S   = _____.

9. D   = _____.

10. D   = _____.

From the previous activity, these terms have something to do with the new lesson. These will help you understand the different markets for stocks and bonds and it will be easier for you to use and apply these terms on the computations regarding our next topic.

Notes to the Teacher

This module will help you to teach your students the importance of stocks and bonds and how will you positively influence them on investment decisions and to be financially literate. You can also prepare additional activities, resources, videos to feed additional inputs as you may feel appropriate that will deepen the learners understanding of the lesson.

What's New

This is an activity that will test your decision prowess. Given 2 scenarios below, answer questions below.

Scenario 1.

Your grandparents gave you ₱ 175,000.00 on your 16th birthday. You were instructed to invest the money so that the earnings can be used to pay for your tuition fee in college. Having heard about the risks and rewards of the stock market from your parents, you become interested in buying stocks in a particular company. Below are the options given to you by your parents:

Option1: Company ABC's selling stock is ₱ 1,500.00 per share that will have a dividend of ₱ 200.00 per year. The stock can be sold after two years at ₱ 2,000.00 and the market requires a rate of return of 15%.

Option2: Company XYZ's selling stock is ₱ 1,000.00 per share that will have a dividend of ₱ 180.00 per year. The stock can be sold after two years at ₱ 2,000.00 and the market requires a rate of return of 7%.

In which company will you invest your money? Why?

_____
_____
_____

Scenario 2.

Suppose that you withdraw ₱ 1,500 from your savings account. Over the weekend, several people want to borrow money from you. Read the stories and decide to whom you will lend your money.

Story1. Your younger sister is having a garage sale. She needs cash to make change for the day. She will sell you a bond for ₱ 1,000.00. You will keep the bond for a week, and she promised to pay you back.

Story2. Your older brother has a small business idea but doesn't have any money. He wants to borrow your ₱ 1,500.00 and promised to pay you back ₱ 1,800.00 in four weeks.

Story3. Your best friend at school, whom you know very-well, wants to borrow your ₱ 1,500.00 to buy cupcakes. She plans to sell at a higher price and promised to pay you back ₱ 1,700.00 in two weeks.

Whose bonds will you buy? Why?

_____
_____
_____

What is It

Before we proceed to our next activity, let us recall some different terms about stocks.

Definition of Terms in Relation to stocks

Stocks – share in the ownership of a company

Dividend – share in the company's profit

Dividend Per Share – ratio of the dividends to the number of shares

Stock Market – a place where stocks can be bought or sold. The stock market in the Philippines is governed by the Philippine Stock Exchange (PSE).

Market Value – the current price of a stock in which it can be sold

Stock Yield Ratio – ratio of the annual dividend per share and the market value per share. Also called current stock yield.

Par Value – the per share amount as stated on the company certificate. Unlike market value, it is determined by the company and remains stable over time.

Stock valuation is considered to have high value if the stockholder gets higher dividend at present and in the future, otherwise the stock is considered to have a low value. The computation of the stock value is necessary in order to know if the stock market value is cheap or expensive at a given time.

Example 1:

A certain financial institution declared a ₱ 30,000,000 dividend for the common stocks. If there is a total of 700,000 shares of common stocks, how much is the dividend per share?

     Given: Total Dividend = ₱ 30,000,000.00

         Total Shares = 700,000

     Find: Dividend per share

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Solution:

Dividend per share = $\frac{\text{Total Dividend}}{\text{Total Shares}}$

$= \frac{30,000,000}{700,000}$

$= 42.86$

Therefore, the dividend per share is ₱ 42.86

Example 2:

A certain corporation declared a 3% dividend on a stock with a par value of ₱ 500.00 Mrs. Lingan owns 200 shares of stocks with a par value of ₱ 500.00 How much is the dividend she received?

Given: Dividend percentage = 3%

Par Value = ₱ 500.00

Number of Shares = 200

Find: Dividend

Solution:

The dividend per share is: ₱ 500 x 0.03 = ₱15

Since there are 300 shares, the total dividend is: ₱15/share x 200 shares =

₱ 3,000.00

In summary,

Dividend = (Dividend Percentage) x (Par Value) x (No. of Shares)

$= (0.03)(500)(200)$

$= 3,000$

Thus, the dividend is ₱ 3,000.00

Example 3:

Corporation A, with a current market value of ₱ 52.00, give a dividend of ₱ 8.00 per share of its common stock. Corporation B, with a current market value of ₱ 95.00, give a dividend of ₱ 12.00 per share. Use the stock yield ratio to measure how much dividends shareholders are getting in relation to the amount invested.

Solution.

Given: Corporation A:

Dividend per share = ₱ 8

Market Value = ₱ 52

Find: Stock yield ratio

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Stock yield ratio = $\frac{\text{dividend per share}}{\text{market value}}$

$$= \frac{8}{52}$$

$$= 0.1538 = 15.38\%$$

Given: Corporation B

Dividend per share = ₱ 12.00

Market Value = ₱ 95.00

Find: Stock yield ratio

Stock yield ratio = $\frac{\text{dividend per share}}{\text{market value}}$

$$= \frac{12}{95}$$

$$= 0.1263 = 12.63\%$$

Corporation A has a higher stock-yield-ratio than Corporation B. thus, each peso will earn you more if you invest in corporation A than in corporation B. If all other things are equal, then it is wiser to invest in Corporation A.

As example 3 shows, the stock yield ratio can be used to compare two or more investments.

Definition of Terms in Relation to bonds.

Bond – interest-bearing security which promises to pay (1) stated amount of money on the maturity date, and (2) regular interest payments called coupons.

Coupon – periodic interest payment that the bondholder receives during the time between purchase date and maturity date; usually receive semi-annually.

Coupon Rate – the rate per coupon payment period; denoted by r.

Price of a bond – the price of the bond at purchase time; denoted by P.

Par Value or Face Value – the amount payable on the maturity date; denoted by F.

If P = F, the bond is **purchase at par.**

If P < F, the bond is **purchased at a discount.**

If P > F, the bond is **purchased at premium.**

Term of a Bond – fixed period of time (in years) at which the bond is redeemable as stated in the bond certificate; number of years from the time of purchased to maturity date.

Fair Price of a Bond – present value of all cash inflows to the bondholder.

Example 4: Determine the amount of the semi-annual coupon for a bond with a face value of ₱300,000.00 that pays 10% payable semi-annual for its coupon.

Given: Face Value F = 300,000

Coupon Rate = 10%

Find: Amount of the semi-annually coupon

Solution:

Annual Coupon amount: 300,000(0.10) = 30,000

Semi-Annually Coupon Amount: $30,000 \left(\frac{1}{2}\right) = 15,000$

Thus, the amount of semi-annual coupon is ₱ 15,000.00

Note: The **coupon rate** is used only for computing the coupon amount, usually paid semi-annually. It is *not* the rate at which money grows. Instead current market conditions are reflected by the **market rate,** and it will be used to compute the present value of future payments.

Example 5:

 Find the value of a ₱ 20,000.00 bond with interest of 14% compounded semi-annually which is redeemable at 108% in 5 years that yields the purchaser 6% converted semi-annually.

Solution:

Finding the purchase price of the bond requires us to determine first the coupon payment and the redemption value of the bond. Using the information given in the problem, substitute the values to the respective formulas. Thus, we have

F_v = Face Value = ₱ 20,000

r_b = bond rate = 0.14

m = number of conversion period per year = 2

t = term = 5 years

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r_y = yield rate = 0.06

b = periodic bond rate = $\frac{0.14}{2}$ = 0.07

n = total number of conversion period = 5(2) = 10

i = periodic rate = $\frac{0.06}{2}$ = 0.03

Substitute these values to compute the following:
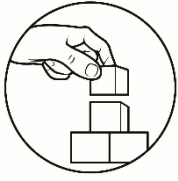
Coupon payment: $c_p = (20{,}000)(0.07) = ₱ \, 1{,}400$

Redemption Value: $R_v = (20{,}000)(1.08) = ₱ \, 21{,}600$

Purchase Price:

$$p = R_v(1+i)^{-n} + c_p\left[\frac{1-(1+i)^{-n}}{i}\right]$$

$$p = (21{,}600)(1+0.03)^{-10} + 1{,}400\left[\frac{1-(1+0.03)^{-10}}{0.03}\right] = ₱ \, 28{,}014.71$$

Therefore, the investor who pays ₱28,014.71 is investing the money.

Activity 1.1. Complete the table below by supplying the correct dividend, shares and dividend per share.

	Dividend	Shares	Dividend per share
1	₱ 10,000.00	750	
2		1,000	₱ 15.25
3	₱ 2,000,000.00		₱ 200.00

Activity 1.2. Complete the table below by supplying the correct dividend, shares and dividend per share.

	Dividend Percentage	Par Value	Shares	Dividend
1	5%	₱ 700.00	200	
2		₱ 500.00	50	₱12,000.00
3	3%		100	₱ 3000.00
4	7.5%	₱ 350.00		₱ 5000.00

Activity 1.3. Solve the following problems.

1. A financial institution declares a dividend of ₱ 75,000,000.00 for its common stock. Suppose there are 900,000 shares of common stock, how much is the dividend per share?

2. ABC Corporation gives ₱ 38.00 dividend per share for its common stock. The market value of stock is ₱ 10800. Determine the stock yield ratio.

3. A bank declares a dividend of ₱27.00 per share for the common stock. If the common stock closes at ₱ 93.00, how large is the stock yield ratio on this investment?

4. Find the amount of the semi-annual coupon for a ₱ 200,000.00 bond which pays 5% convertible semi-annually coupons.

5. Determine the amount of semi-annual coupon paid for a 3% bond with a face value of ₱ 100,000.00 which matures after 8 years. How many coupons are paid?

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What I Have Learned

Complete the following statements by writing the correct word or phrase.

1. _____ is the share in the company's profit.

2. The ratio of the dividends to the number of shares is the _____.

3. _____ is the per share amount as stated on the company certificate. Unlike market value, it is determined by the company and remains stable over time.

4. _____ is ratio of the annual dividend per share and the market value per share. Also called current stock yield.

5. The rate per coupon payment period; denoted by r is _____.

6. The present value of all cash inflows to the bondholder is _____.

7. The price of the bond at purchase time; denoted by P is _____.

8. A certain financial institution declared a ₱ 10,000,000.00 dividend for the common stocks. If there is a total of 300,000 shares of common stocks, then the dividend per share is _____.

9. Corporation Gen. Math, with a current market value of ₱ 95.00, give a dividend of ₱ 15.00 per share of its common stock. The stock yield ratio is _____.

10. The amount of the semi-annual coupon for a bond with a face value of ₱ 100,000 .00 that pays 15% payable semi-annual for its coupon is _____

Reflection. Going back to our first problem, it is time to review our answers. You can now decide correctly after this learning experiences.

Scenario 1.

Your grandparents gave you ₱ 175,000.00 on your 16th birthday. You were instructed to invest the money so that the earnings can be used to pay for your tuition fee in college. Having heard about the risks and rewards of the stock market from your parents, you become interested in buying stocks in a particular company. Below are the options given to you by your parents:

Option1: Company ABC's selling stock is ₱ 1,500.00 per share that will have a dividend of ₱ 200.00 per year. The stock can be sold after two years at ₱2,000.00 and the market requires a rate of return of 15%.

Option2: Company XYZ's selling stock is ₱ 1,000.00 per share that will have a dividend of ₱ 180.00 per year. The stock can be sold after two years at ₱2,000.00 and the market requires a rate of return of 7%.

In which company will you invest your money? Why?

_____
_____
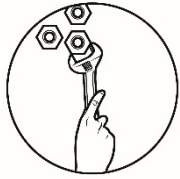_____
_____
_____

Scenario 2.

Suppose that you withdraw ₱ 1,500.00 from your savings account. Over the weekend, several people want to borrow money from you. Read the stories and decide to whom you will lend your money.

Story1. Your younger sister is having a garage sale. She needs cash to make change for the day. She will sell you a bond for ₱ 1,000.00 You will keep the bond for a week, and she promised to pay you back.

Story2. Your older brother has a small business idea but doesn't have any money. He wants to borrow your ₱ 1,500.00 and promised to pay you back ₱ 1,800.00 in four weeks.

Story3. Your best friend at school, whom you know very-well, wants to borrow your ₱ 1,500.00 to buy cupcakes. She plans to sell at a higher price and promised to pay you back ₱1,700.00 in two weeks.

Whose bonds will you buy? Why?

_____
_____
_____
_____
_____

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What I Can Do

Perform the task below.

Stocks and bonds are efficient ways to help businesses grow. For businesses, alternative ways to raise money for growth, such as saving and reinvesting its profits, can take a very long time. Create a poster showing the importance of stocks and bonds for you as an individual, for the community and for the nation.

Rubrics for Poster-making

Description	5	4	3	2	1
Competence Required Elements	The poster includes all required elements as well as additional information	The poster includes all required elements.	All required elements are included on the poster.	One of the required elements is not included on the poster.	Several required elements are missing.
Graphics Relevance	All graphics are related to the topic and make it easier to understand. All borrowed graphics have a source citation.	All graphics are related to the topic and most of it are easier to understand. All borrowed graphics have a source citation.	All graphics are related to the topic. Some borrowed graphics have a source citation.	Graphics do not relate to the topic. One or two borrowed graphics have a source citation.	Graphics do not relate to the topic. Several borrowed graphics do not have a source citation.
Attractiveness	The poster is exceptionally attractive in terms of design, layout, and neatness.	The poster is attractive in terms of design, layout, and neatness.	The poster is acceptably attractive in terms of design, layout, and neatness.	The poster is attractive though it may be a bit messy.	The poster is distractingly messy or very poorly designed. It is not attractive.

Assessment

Choose the letter of the best answer. Write the chosen letter on a separate sheet of paper.

1. The periodic interest payment that the bondholder receives during the time between purchase date and maturity date.
   - a. Coupon Amount
   - b. Coupon Rate
   - c. Face Value
   - d. Market Value

2. A certain corporation declared a 4.5% dividend on a stock with a par value of ₱ 400.00. Mr. Reyes owns 100 shares of stocks with a par value of ₱ 400.00 How much is the dividend she received?
   - a. ₱ 1500.00
   - b. ₱ 1600.00
   - c. ₱ 1700.00
   - d. ₱ 1800.00

3. A certain financial institution declared a ₱ 80,000,000.00 dividend for the common stocks. If there is a total of 500,000 shares of common stocks, how much is the dividend per share?
   - a. ₱ 140.00
   - b. ₱ 150.00
   - c. ₱ 160.00
   - d. ₱ 170.00

4. It is the rate per coupon payment period; denoted by r.
   - a. Coupon Amount
   - b. Coupon Rate
   - c. Face Value
   - d. Market Value

5. It is the interest rate the bond issuer will use in computing the interest payment, usually expressed in percent.
   - a. Coupon Date
   - b. Dividend
   - c. Dividend Rate
   - d. Maturity Date

6. It is the ratio of the annual dividend per share and the market value per share.
   - a. Coupon Amount
   - b. Dividend Rate
   - c. Market Value
   - d. Stock yield ratio

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7. A bank declared a dividend of ₱ 35.00 per share for the common stock. If the common stock closes at ₱ 98.00, how large is the stock yield ratio on this investment?
   a. 0.36
   b. 0.39
   c. 0.63
   d. 0.66

8. Determine the amount of semi-annual coupon paid for a 3% bond with a face value of ₱ 100,000.00 which matures after 8 years. How many coupons are paid?
   a. 10 times
   b. 13 times
   c. 16 times
   d. 19 times

For numbers 9, 10 and 11.

Corporation M, with a current market value of ₱ 65.00, give a dividend of ₱ 11.00 per share of its common stock. Corporation N, with a current market value of ₱ 75.00, give a dividend of ₱ 15.00 per share.

9. Find the stock yield ratio for Corporation M.
   a. 14.56%
   b. 15.76%
   c. 16.92%
   d. 17.08%

10. What is the stock yield ratio for Corporation N?
   a. 18%
   b. 20%
   c. 22%
   d. 24%

11. In which corporation will you invest your money? Why?
   a. Corporation M, because each peso will earn you more if you invest in M than in N.
   b. Corporation M, the lower the share the higher the stock yield ratio.
   c. Corporation N, because each peso will earn you more if you invest in N than in M.
   d. Corporation N, the lower the stock yield ratio the more you earn.

12. Determine the amount of the semi-annual coupon for a bond with a face value of ₱ 450,000.00 that pays 12% payable semi-annual for its coupon.
   a. ₱ 27,000.00
   b. ₱ 24,000.00
   c. ₱ 21,000.00
   d. ₱ 18,000.00

For numbers 13, 14 and 15.

Find the value of a ₱ 50,000.00 bond with interest of 12% compounded semi-annually which is redeemable at 105% in 3 years that yields the purchaser 8% converted semi-annually.

13. Find the amount of the semi-annual coupon.
    a. ₱ 2500.00
    b. ₱ 2750.00
    c. ₱ 3000.00
    d. ₱3250.00

14. Find the redemption value of ₱ 50,000.00
    a. ₱ 52,500.00
    b. ₱ 55,200.00
    c. ₱ 56,500.00
    d. ₱ 59,200.00

15. Find the fair price of the given bond.
    a. ₱ 55,319.56
    b. ₱ 57,217.92
    c. ₱ 59,034.12
    d. ₱ 61,491.41
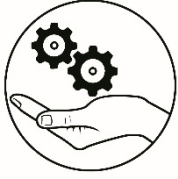
Additional Activities

Perform what is being asked in the following:

1. What will you pay today for a stock that is expected to make a ₱ 45.00 dividend in one year if the expected dividend rate is 5% and you require a 12% return on your investment?

2. XYZ Company's preferred stock is selling for ₱ 60.00 a share. If the required return is 8%, what will the dividend be two years from now?

3. Your broker is trying to sell you a stock with a current market price of ₱ 2,160.00 The stock's last dividend was ₱ 53.25, and earnings and dividends are expected to increase at a constant growth rate of 10%. Is the stock fairly valued if the return is 13%? Explain why or why not.
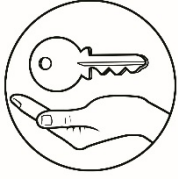
![Answer Key icon] **Answer Key**

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What I Know

1. C
2. D
3. A
4. B
5. A
6. C
7. D
8. B
9. A
10. B
11. A
12. A
13. D
14. B
15. C

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What's More

Activity 1.1
1. ₱13.33
2. ₱15,250.00
3. 10,000

Activity 1.2
1. ₱7,000.00
2. 48%
3. ₱1000.00
4. ₱190.48
5.

Activity 1.3
1. ₱83.33
2. 0.35%
3. 0.29
4. ₱5,000.00
5. 16 times

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Assessment

1. A
2. D
3. C
4. B
5. C
6. D
7. A
8. C
9. C
10. B
11. C
12. A
13. C
14. A
15. B

</td></tr>
</table>

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