



## What Is This Module About?

The calendar is an essential part of our everyday life. From time to time you find yourself asking or being asked, “What day is it today?” or “I’ll see if I have a scheduled appointment next week.”

Have you ever imagined how your life would be like if there were no calendar? How would you know how many days or months had passed? How would you celebrate your birthday each year? If there were no calendar, we would have no concept of “this year” or “last year” or “this month.”

This may make you wonder who created or invented the calendar. If you study this module, you will learn many facts about the calendar. You will also discover many things that you can do using the calendar to help plan and organize your everyday activities.

The module has four lessons:

Lesson 1—*The Calendar*

Lesson 2—*Practical Uses of the Calendar*

Lesson 3—*Using the Calendar in Family Planning*

Lesson 4—*Using the Calendar in Making Schedules*



## What Will You Learn From This Module?

After studying this module, you should be able to:

- ◆ differentiate the various measures of time;
- ◆ explain why the Gregorian calendar is being used today;
- ◆ identify some of the practical uses of the calendar;
- ◆ identify the fertile period of a woman to help a couple in planning their family; and
- ◆ create a schedule of activities or appointments using a calendar.



## Let's See What You Already Know

Let us find out how much you know about the topic that we are about to discuss.  
Encircle the letter of the correct answer.

1. Different months have different numbers of days which may vary from \_\_\_\_\_.
  - a. 26 to 32
  - b. 27 to 31
  - c. 30 to 31
  - d. 28 to 31
2. A year is equivalent to the number of days it takes \_\_\_\_\_.
  - a. the sun to go around the earth
  - b. the earth to go around the sun
  - c. the earth to go around the moon
  - d. the moon to go around the earth
3. The calendar that we are using today is called the \_\_\_\_\_.
  - a. Julian calendar
  - b. Islamic calendar
  - c. Gregorian calendar
  - d. Hebrew calendar
4. During a leap year, February has \_\_\_\_\_ days.
  - a. 29
  - b. 32
  - c. 30
  - d. 31
5. The calendar can be used for \_\_\_\_\_.
  - a. making schedules
  - b. making plans for occasions
  - c. computing for the ages of persons
  - d. all of the above
6. If Jessa was born on June 5, 1989, how old would she be by February 14, 2001?
  - a. 10 years, 8 months, 10 days old
  - b. 11 years, 7 months, 10 days old
  - c. 11 years, 8 months, 9 days old
  - d. 10 years, 7 months, 9 days old
7. If we use New Year's Day as the base date, how many days would there be before Valentine's Day?
  - a. 41
  - b. 42
  - c. 43
  - d. 44

8. Assume that the first day of a woman's last menstrual period falls on the 2<sup>nd</sup> day of the month. If she and her partner do not want to have a child yet, they should avoid sexual intercourse from the\_\_\_\_\_.
- 11<sup>th</sup> to the 21<sup>st</sup> days of the month
  - 12<sup>th</sup> to the 20<sup>th</sup> days of the month
  - 10<sup>th</sup> to the 20<sup>th</sup> days of the month
  - 10<sup>th</sup> to the 21<sup>st</sup> days of the month
9. If the couple (in Question 8) wants to have a child, they should engage in sexual intercourse between the\_\_\_\_\_.
- 15<sup>th</sup> and the 20<sup>th</sup> of the month
  - 10<sup>th</sup> and the 20<sup>th</sup> of the month
  - 12<sup>th</sup> and the 20<sup>th</sup> of the month
  - 11<sup>th</sup> and the 21<sup>st</sup> of the month
10. If Cely is pregnant and the first day of her last menstrual period was last June 16, when is she likely to give birth?
- March 29 of the next year
  - March 23 of the next year
  - March 16 of the next year
  - April 16 of the next year
11. Your boss told you that you will have to render overtime services for the second half of the month. Assuming it is September, the "second half of the month" means \_\_\_\_\_.
- September 20 to 25
  - September 1 to 15
  - September 16 to 30
  - October 1 to 15

Well, how was it? Do you think you fared well? Compare your answers with those in the *Answer Key* on pages 44 and 45 to find out.

If all your answers are correct, very good! This shows that you already know much about the topic. You may still study the module to review what you already know. Who knows, you might learn a few more new things as well.

If you got a low score, don't feel bad. This means that this module is for you. It will help you understand important concepts that you can apply in your daily life. If you study this module carefully, you will learn the answers to all the items in the test and a lot more! Are you ready?

You may go now to the next page to begin Lesson 1.

## The Calendar

Have you seen a calendar before? Do you have one at home? How do you use it?

A calendar is not just a set of numbers that we follow to know what the date is. It helps us in organizing our everyday activities, whether it be what menu to cook for Monday, when to bring your pet to the veterinarian or when to spray insecticide on your farm. We will not be able to do all of these “on time” if not for the calendar.

But for you to be able to effectively use the calendar, you have to understand its features first. That is what we are going to discuss in this lesson.

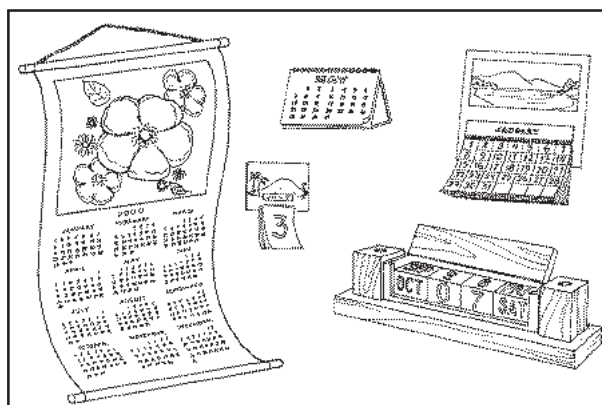
After studying this lesson, you should be able to:

- ◆ differentiate a decade, a century and a millennium;
- ◆ differentiate B.C. from A.D.; and
- ◆ explain why the Gregorian calendar is being used today.



### Let's Think About This

Look at the calendars below.



Which of the calendars in the picture is similar to the one you are using at home? How are they similar? How are they different? What do the different parts of the calendar mean?

Calendars have been used for thousands of years by people of different cultures around the world. The calendars that we are using today come in different forms and sizes. But how does a calendar work? Let us find out.



## Let's Read

The calendar is used to measure and record the passage of time. Now, this may lead you to think that the calendar is no different from a clock. Well, the clock also measures and records the passage of time but the calendar covers and measures longer lengths of time.

The basic units of time are seconds, minutes and hours. These are measured by the clock. The calendar, on the other hand, measures time in days, weeks, months, years, decades, centuries and millenniums. The first four measures—days, weeks, months and years—may already be familiar to you because you actually see them in the calendar. However, the terms *decade*, *century* and *millennium* may be quite new to you. Besides, you may say, they do not appear in the calendar!

We will discuss this further later on.

In the meantime, let us review some basic facts.



## Let's Try This

Complete the following sentences. Write your answers in the blanks provided.

1. A day is composed of \_\_\_\_\_ hours.
2. A week is composed of \_\_\_\_\_ days.
3. A month may have \_\_\_\_\_ to \_\_\_\_\_ days.
4. A year has \_\_\_\_\_ months.

Check your answers against the *Answer Key* on page 45.

Did you get the answers right?

Let us look more closely at what makes up a day, a week, a month and a year.

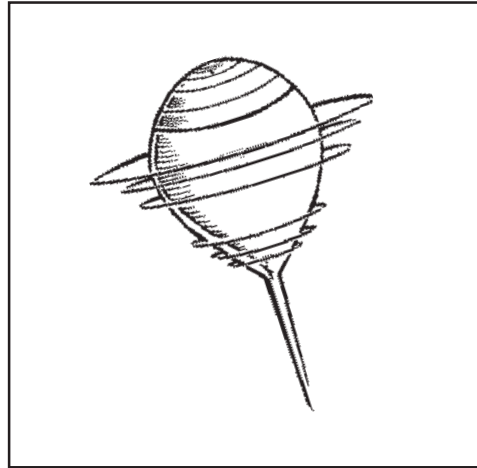
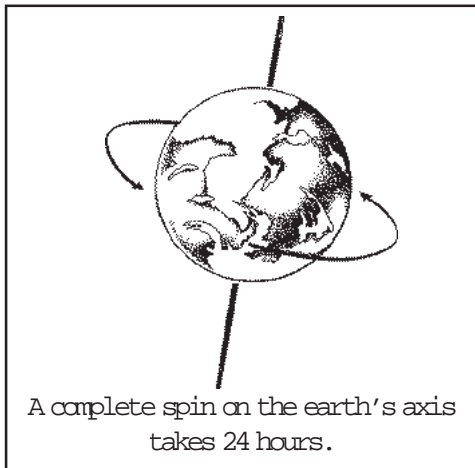


## Let's Think About This

Day	A day is equivalent to 24 hours.
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Why are there 24 hours in a day?

The answer lies in the Earth's rotation. The Earth turns on its own axis much like a top spins when you play with it. This "spinning around the axis" takes 24 hours.



Week	A week has seven days.
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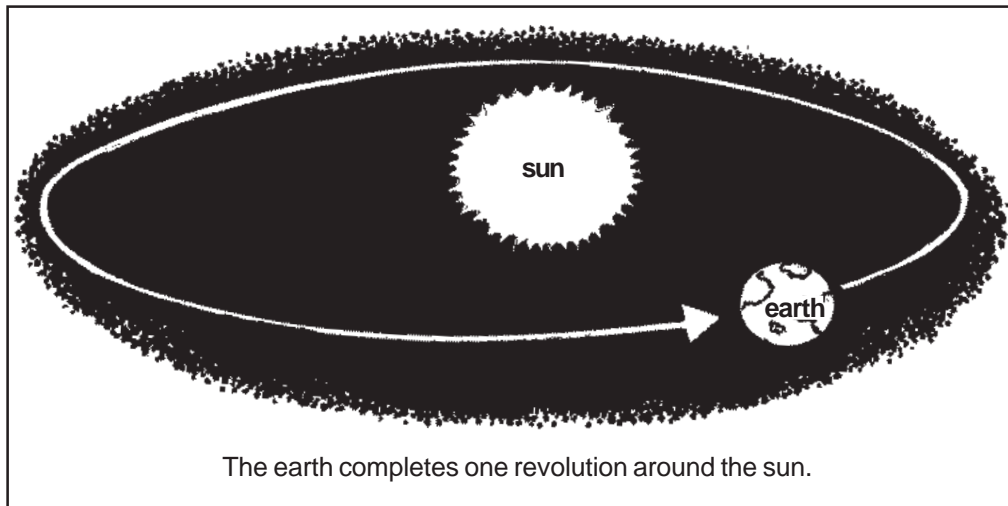
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7						

Month	A calendar year is divided into 12 parts, each of which is called a month. Calendar months vary in length from 28 to 31 days.
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Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

A month in a calendar

Year	Each year has 365 days. This is about the time it takes the earth to revolve or go around the sun. A year is composed of 12 months with 28 to 31 days each.
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Now let us go to the other units used to measure time: **decade**, **century** and **millennium**.

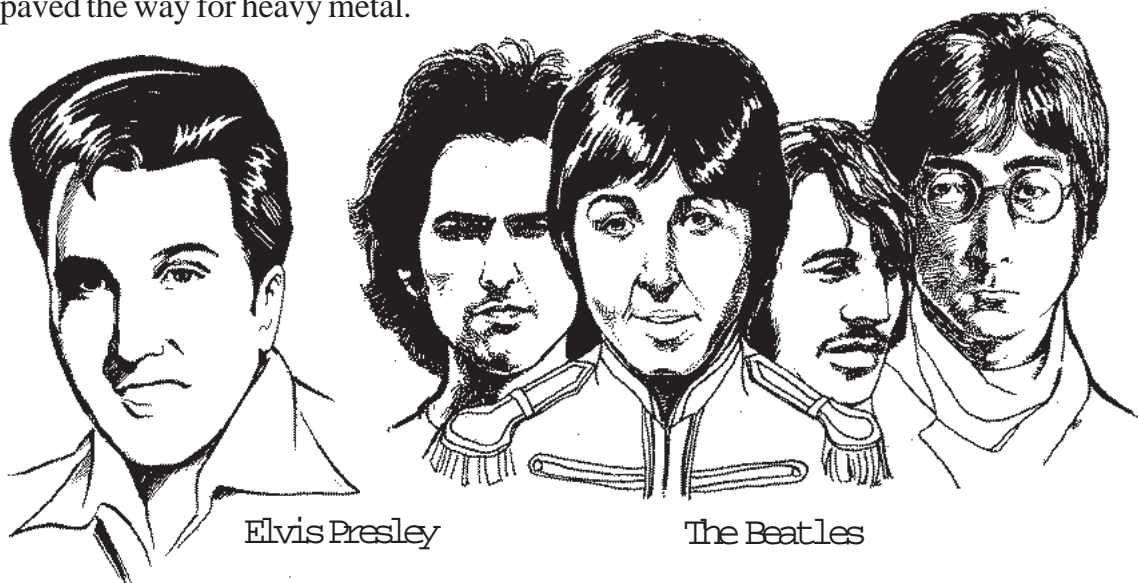


## Let's Read

Read the following article about the history of rock 'n' roll music. Pay attention to the dates mentioned in it.

The term "popular music" can apply to anything from music hall ballads to salsa. "Pop," a more specific type of music, includes everything from 1950s rock 'n' roll to 1990s rap. Rock 'n' roll was the first kind of music to speak directly to the youth. It mixed African-American rhythm and blues with country music.

Elvis Presley made rock 'n' roll a worldwide phenomenon. In Britain, the Beatles added their top-selling songwriting skills to rock 'n' roll, while the Rolling Stones incorporated Chicago blues into their music. The Stones' loud, tough sound paved the way for heavy metal.



Meanwhile, Americans such as Aretha Franklin created a new blend of rhythm and blues and gospel music, which came to be known as soul music. Disco, which made heavy use of synthesizers and rap music, is a direct descendant of soul music. In the late 1970s, a new generation produced its own wild version of rock ‘n’ roll, called punk rock. Played at a frenzied speed, punk rock produced bands such as the Sex Pistols.

The 1980s and early 1990s saw new superstars like Michael Jackson and Madonna and groups such as U2 filling huge stadiums.

The 1990s also saw the birth of alternative music or grunge, an offshoot of rock. Bands such as Nirvana, Pearl Jam, Stone Temple Pilots and Radiohead became an instant rage. And musicians like Kurt Cobain, Nirvana’s front man, became celebrity idols.



## Let’s Try This

What years were mentioned in the article?

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Several periods were mentioned in the article. These include the 1950s, 1970s, 1980s and 1990s.

These dates actually cover decades. So, what is a decade?

A **decade** refers to a span of 10 years. Therefore “the 1950s” refers to the years 1951 to 1960, “the 1990s” refers to the years 1991 to 2000, and so on.

So, is it clear to you now what a decade is? Let’s see.



## Let’s Review

Fill up the table below. Write down the years covered by the given decades.

Decade	Period covered
2040s	
2020s	
2030s	
2060s	

Check your answers against the *Answer Key* on page 45.

If a decade is equivalent to 10 years, what about a century? Let’s find out.





## Let's Try This

Imagine yourself going back 100 years. How do you think life was like in the Philippines back then? Certainly it was very different from today. A century is, after all, a very, long time. Many things have happened during the past 100 years that changed the way life is in our country.

Do you now know what a century is?

A century is equivalent to 100 years.

Here's another example. If your grandmother was born on January 1, 1901, her 100<sup>th</sup> birthday will be on January 1, 2001. She will be a century old on that date.



## Let's Think About This

If a century is equivalent to 100 years, how many decades are there in a century?

This is a matter of relating one unit of time to another. Let us analyze.

A decade is equivalent to 10 years. A century is equivalent to 100 years. Since we want to find out how many decades there are in a century (or in other words, how many tens there are in a hundred), we have to use division.

To solve:

**Step 1: Find out what numbers are to be divided. In this equation, 100 is the dividend and 10 is the divisor.**

(dividend)                      100 years ÷ 10 years                      (divisor)

**Step 2: Get the highest possible dividend that can be divided by the divisor. In our equation this is 10.**

$$\begin{array}{r} 1 \\ 10 \text{ years } \overline{) 100 \text{ years}} \end{array}$$

**Step 3: Then start dividing.**

$$\begin{array}{r} = 1 \\ 10 \text{ years } \overline{) 100 \text{ years}} \end{array} \quad (10/10 = 1)$$

**Step 4: Multiply the initial answer (1) by the divisor.**

$$\begin{array}{r}
 \times 1 \\
 10 \text{ years } \overline{) 100 \text{ years}} \\
 \underline{= 10}
 \end{array}
 \quad (1 \times 10 = 10)$$

**Step 5: Subtract the answer from the dividend. Then bring down the next number in the dividend.**

$$\begin{array}{r}
 10 \text{ years } \overline{) 100 \text{ years}} \\
 \underline{- 10} \quad \downarrow \\
 00
 \end{array}
 \quad \begin{array}{l}
 (10 - 10 = 0) \\
 (\text{bring down } 0)
 \end{array}$$

**Step 6: This forms (00), your new dividend. Then repeat the process of division.**

$$\begin{array}{r}
 = 10 \\
 10 \text{ years } \overline{) 00} \\
 \underline{- 10} \\
 00
 \end{array}
 \quad (00/10=0)$$

**Answer: There are 10 decades in a century.**

Okay, we have one more unit of time to discuss, the millennium. A **millennium** is equivalent to 1,000 years.

If the year today is 2000 and you go back 1,000 years, you will end up in the year 1000. You can therefore say that the year 1000 was a millennium ago.

How about the next millennium? When will it be if we are in the year 2000?

If we are now in the year 2000, the next millennium will begin in the year 3000.

To illustrate:

$$\begin{array}{r}
 2000 \text{ year today} \\
 + 1000 \text{ a millennium} \\
 \hline
 3000 \text{ the next millennium}
 \end{array}$$



## Let's Review

Let's see if you got the concepts of day, week, month, year, decade, century and millennium right. Write the answers to the following questions in the blanks provided.

1. How many years are there in a decade? \_\_\_\_\_
2. How many decades are there in a century? \_\_\_\_\_
3. How many centuries are there in a millennium? \_\_\_\_\_

Do you think you got the answers right? Check your answers against found in the *Answer Key* on page 45.



## Let's Read

### ***A.D. and B.C.***

Have you heard of the terms *A.D.* and *B.C.*?

*B.C.* stands for "Before Christ." The years before the birth of Christ are referred to as *B.C.* For example, 4 *B.C.* means four years before Christ was born.

On the other hand, *A.D.* stands for "Anno Domini" which means "in the year of our Lord." These are the years after the birth of Christ. For example, 4 *A.D.* means four years after the birth of Christ.

Note that *B.C.* and *A.D.* are sometimes written without the periods, that is, as *BC* and *AD*.

Let's try computing dates across *B.C.* and *A.D.*

If we are now in the year 2000 *A.D.*, how many years have passed since 4 *B.C.*? The computation is simple. We just have to add.

2000	year today
+ 4	base year (4 <i>B.C.</i> )
2004	years that have passed since 4 <i>B.C.</i>

**Answer: 2004 years have passed since 4 *B.C.***



## Let's Try This

Now, try solving this on your own. If we are now in the year 2000 *A.D.*, how many years have passed since 340 *B.C.*?

Check your answer against the *Answer Key* on page 45.



## Let's Learn

### *The Gregorian Calendar*

Do you know that there are different types of calendars? They follow different numbering and grouping systems (the months as well as the number of days are different). The calendar that most of us are currently using is called the **Gregorian calendar**, named after Pope Gregory XIII of Rome. The Gregorian calendar has been in use since 1582, when Pope Gregory replaced the Julian calendar with one named after him. The Julian calendar was named after Julius Caesar, a ruler of ancient Rome. It was widely used after 46 B.C. Most of the names of the months we use in today's calendar came from this calendar.

Aside from revising the Julian calendar, Pope Gregory XIII also decreed that each fourth year would be a **leap year**. During this kind of year, February would have an extra day.

Do you know why we have leap years? It is because if the  $365\frac{1}{4}$  days in a year are distributed among the 12 months, there would be  $\frac{1}{4}$  of a day left over. To solve this problem, we set the  $\frac{1}{4}$  day aside every year for four years until they add up to a day. The extra day is then placed at the end of February. Do you see now why we have a leap year every four years?

The year 2000 is an example of a **leap year**. A leap year is exactly divisible by 4. This means that when you divide it by 4, you get a whole number. Note that  $2000 \div 4 = 500$ , which is a whole number. But if you divide 2001 by 4, you don't get a whole number. Instead, you get 500.25 or  $500\frac{1}{4}$ . Thus, 2000 is a leap year, while 2001 is not.



## Let's Review

If the year 2000 is a leap year, when will the next leap year be?

Check your answer with that in the *Answer Key* on page 46.



## Let's Learn

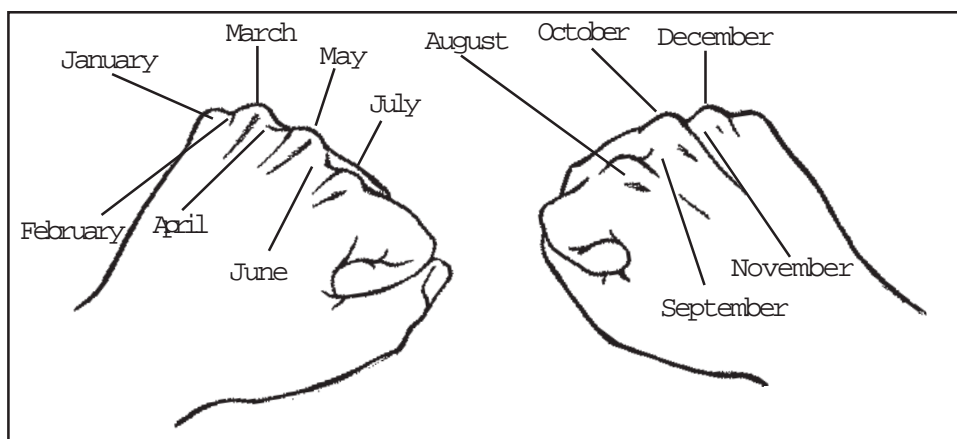
The different months in the Gregorian calendar have different numbers of days.

<i>January</i>	– 31	<i>July</i>	– 31
<i>February</i>	– 28 (29 if it is a leap year)	<i>August</i>	– 31
<i>March</i>	– 31	<i>September</i>	– 30
<i>April</i>	– 30	<i>October</i>	– 31
<i>May</i>	– 31	<i>November</i>	– 30
<i>June</i>	– 30	<i>December</i>	– 31

It will be easier for you to remember the number of days of each month by looking at your knuckles.

Here's how.

Close both of your hands. Did you notice that the bones at the base of your fingers (thumb not included) protrude?



The four bones at the base of each finger of your left hand correspond to January, March, May and July. The bones on your right hand correspond to August, October and December. These are the months with 31 days.

The spaces in between these bones correspond to February, April and June (on the left hand) and September and November (on the right hand). These are the months with 30 days except for February, which may have either 28 or 29 days.



## Let's Read

Do you know how the months got their names? Read this list to find out.

January	This month was named after <i>Janus</i> , the Roman god of gates and doors. He symbolizes openings and beginnings.
February	The name was derived from the Latin word <i>Februa</i> , which signifies the festivals of purification.
March	March was the first month of the Roman year. It was named after <i>Mars</i> , the god of war.
April	The Romans named this month <i>Aprilis</i> , from the word <i>aperire</i> ("to open"), probably because flowers begin to bloom in this season.

May	The name is believed to have been derived from the Latin word <i>Maius</i> , which means “month.” The name may also have come from <i>Maia</i> , a Roman goddess.
June	According to experts, the name was derived from the Roman goddess <i>Juno</i> .
July	It was the fifth month of the year in the early Roman calendar and was thus called <i>quintilis</i> , or “fifth month,” by the Romans.
August	This month was named in honor of Emperor Augustus of Rome. Several of the most fortunate events of his life occurred during this month.
September	It was the seventh month of the Roman calendar and its name was thus taken from the Latin word <i>septem</i> , meaning “seven.”
October	October was the eighth month of the Roman calendar. The name October comes from the Latin word <i>octo</i> , which means “eight.”
November	November was the ninth month in the Roman calendar. The name was derived from the Latin word <i>novem</i> , which means “nine.”
December	December was the tenth month in the Roman calendar. The name was based on the Latin word <i>decem</i> , which means “ten.”

Now that you are familiar with the features of the calendar, let us see how you can apply this knowledge in your everyday life. This will be the topic of Lesson 2.



## Let's Remember

Before you proceed to Lesson 2, do not forget the highlights of this lesson.

- ◆ A day has 24 hours, a week has seven days, a month has four weeks and a year has 12 months.
- ◆ A decade has 10 years.
- ◆ A century has 10 decades.
- ◆ A millennium has 10 centuries.
- ◆ B.C. stands for “Before Christ” or the years before Christ was born.
- ◆ A.D. stands for “Anno Domini” or the years after Christ was born.

- ◆ The calendar we are currently using is the Gregorian calendar. Prior to this, the Julian calendar was used.

Now that you already know how the calendar “works,” you can proceed to Lesson 2. This time you will learn about the practical uses of the calendar.

# Practical Uses of the Calendar

Now that you better understand the structure of the calendar, and measurement of time, you will be able to use the calendar more effectively in your everyday life.

After studying this lesson, you should be able to:

- ◆ identify some of the practical uses of the calendar;
- ◆ compute for birth dates using the calendar; and
- ◆ compute for time before and after an occasion using the calendar.



## Let's Try This

List down as many practical uses of the calendar as you can think of. Write your answers in the space provided.

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How many uses have you identified?

I'm sure you have quite a lot in your list. Remember that anything that has to do with dates involves the use of a calendar.

Read the following discussion on the practical uses of the calendar and see if the uses you have identified are included in my list.





## Let's Read

### Calculating people's ages

You can use the calendar to calculate how old your friends and family members will be one, five, ten or more years from now. How? Read on to find out.



## Let's Study and Analyze

Mang Raul was born on March 7, 1969. How old (in years, months and days) will Mang Raul be by Christmas 2000?

Let's solve the problem, step by step.

### STEP 1: Identify the given.

March 7, 1969 – Mang Raul's birth date  
Christmas 2000 – base date

### STEP 2: Number the months based on their sequence.

<i>January</i>	–	<i>01</i>	<i>July</i>	–	<i>07</i>
<i>February</i>	–	<i>02</i>	<i>August</i>	–	<i>08</i>
<i>March</i>	–	<i>03</i>	<i>September</i>	–	<i>09</i>
<i>April</i>	–	<i>04</i>	<i>October</i>	–	<i>10</i>
<i>May</i>	–	<i>05</i>	<i>November</i>	–	<i>11</i>
<i>June</i>	–	<i>06</i>	<i>December</i>	–	<i>12</i>

### STEP 3: Convert the dates given into numbers, starting off with the year.

		Year	Month	Day
Mang Raul's birth date	March 7, 1969	1969	03	07
(Base date) Christmas 2000	December 25, 2000	2000	12	25

### STEP 4: Subtract the birth date from the base date.

		Year	Month	Day
(Base date) Christmas 2000	December 25, 2000	2000	12	25
Mang Raul's birth date	March 7, 1969	-1969	-03	-07
ANSWER:		31	09	18

Mang Raul will be 31 years, 9 months and 18 days old by Christmas 2000.



## Let's Solve This Problem

Try doing this one on your own.

Gina was born on January 10, 1988. Her mom's next birthday will be on November 28, 2000. How old would Gina be by then?

Check your answer against that in the *Answer Key* on page 46.

Did you get the correct answer? Follow the same process used in the example.

Now, let's make it a little trickier.

**PROBLEM:** Jean was born on March 21, 1970. How old would she be by January 1, 2001?

To solve:

**STEP 1: Identify the given data.**

Jean's birth date	–	March 21, 1970
Base date	–	January 1, 2001

**STEP 2: Write the given data in numbers, starting with the year.**

		Year	Month	Day
Jean's birth date	March 21, 1970	1970	03	21
Base date	January 1, 2001	2001	01	01

**STEP 3: Subtract the birth date from the base date.**

		Year	Month	Day
Base date	January 1, 2001	2001	01	01
Jean's birth date	March 21, 1970	-1970	-03	-21

This is a bit harder to subtract. Look at the day column—we cannot subtract 21 from 01. Look at the month column—we cannot subtract 03 from 01.

So, while we followed the same steps as in the previous example, we will have to add another step.

What are we going to do now?

**STEP 4: Borrow a year (12 months) from 2001. Distribute 11 months of it to the month column and the remaining month to the day column (January 31). After this, you can already subtract the birth date from the base date.**

		Year	Month	Day
Base date	January 1, 2001	2001	01+11 months	01+30 days
		↓	↓	↓
		2000	12 months	31 days
Jean's birth date	March 21, 1970	-1970	-03	-21
		30	9	10

So, Jean will be 30 years, 9 months and 10 days old by January 1, 2001.



## Let's Solve This Problem

Try doing the same thing with your birthday. Here's a guide question: How old will you be by Christmas 2002?

Do you think you got the right answer? You can consult with the Instructional Manager or Facilitator to check if you did.

Aside from ages, you can also solve for the number of days, weeks or months before or after holidays and other special occasions.



## Let's Read

### *Holidays and special occasions*

Special occasions like birthdays and Christmas are much-awaited events for most of us. In fact, we anticipate these events. We often get excited days or even months before them.

In order for you to know exactly how many days, weeks or months there are before an event or occasion, you need to have knowledge about the calendar.

The process is actually similar to computing for age; however, you have to take note of the number of days of each month.

Look at the list below.

<i>January</i>	– 31	<i>July</i>	– 31
<i>February</i>	– 28 (29 if it is a leap year)	<i>August</i>	– 31
<i>March</i>	– 31	<i>September</i>	– 30
<i>April</i>	– 30	<i>October</i>	– 31
<i>May</i>	– 31	<i>November</i>	– 30
<i>June</i>	– 30	<i>December</i>	– 31



## Let's Study and Analyze

Let's try to solve a problem involving holidays and special occasions.

If today is August 1, how many more days are there before Christmas?

**STEP 1:** Let's write down the number of days of the months from August to December.

August	31	
September	30	
October	31	
November	30	
December	25	(Christmas)

**STEP 2:** Add the number of days of all of the months.

August	31
September	30
October	31
November	30
December	+ 25
	<hr/> 147

**STEP 3:** Subtract the number of days indicated in the given, Aug. 1.

August	31	
September	30	
October	31	
November	30	
December	+ 25	
	<hr/> 147	
	- 1	(for Aug. 1)
	<hr/> 146	

**Answer:** From August 1, there are 146 days before Christmas.

Let's try another one.



## Let's Solve This Problem

Using August 1 again as the base date, how many days are there before New Year's Day?

Check your answer against that in the *Answer Key* on page 47.

Did you get it right?

In our first example, you were asked to count the number of days before an event. Now, what if you were asked to count the number of days **after** an event?



## Let's Study and Analyze

What if you are asked to compute the number of days before an event?

Lina got married last June 15. If today is November 10, how many days have passed since Lina got married?

**STEP 1: Let's write down the number of days of the months June to November.**

June	30	
July	31	
August	31	
September	30	
October	31	
November	10	(today)

**STEP 2: Add the number of days of the months.**

June	30	
July	31	
August	31	
September	30	
October	31	
November	+ 10	
	<u>163</u>	

**STEP 3: Subtract the number of days covered by our base date, June 15.**

June	30	
July	31	
August	31	
September	30	
October	31	
November	+ 10	
	<u>163</u>	
	- 15	(for June 15)
	<u>148</u>	

**Answer: 148 days have passed since Lina got married.**



## Let's Review

How many weeks have passed since Lina got married?

Check your answer using the *Answer Key* on page 47.

Did you get it right? It's just a matter of converting one unit of time to another!



## Let's Solve This Problem

We have just discussed how you can compute the number of days from a past event. Try doing this one on your own.

Jose's brother arrived from the United States last October 5. If today is December 2, how many weeks have passed since Jose's brother arrived?

Check your answer against the *Answer Key* on pages 47 and 48.



## Let's Think About This

What did you notice about our computations involving upcoming and past events?

Did you notice that the process of computing for them is just the same?



## Let's Remember

So far we have discussed three practical uses of the calendar. These are:

- ◆ for calculating the ages of persons and
- ◆ for calculating the length of time before or after an event or occasion.

Astrologers also use the calendar to predict events. They believe that dates have a relation to the sun, moon, stars and planets. Do you know what your zodiac sign is?



## Let's Read

Following is a table of the different zodiac signs and their respective dates. If, for example, your birth date is March 25, then your zodiac sign is Aries because March 25 falls between March 21 to April 20.

Zodiac Sign	Period Covered
Aries	March 21 to April 20
Taurus	April 21 to May 20
Gemini	May 21 to June 21
Cancer	June 22 to July 22
Leo	July 23 to August 22
Virgo	August 23 to September 22
Libra	September 23 to October 22
Scorpio	October 23 to November 21
Sagittarius	November 22 to December 21
Capricorn	December 22 to January 19
Aquarius	January 20 to February 18
Pisces	February 19 to March 20

Zodiac signs have been in use since 2000 B.C. The use of horoscopes in predicting one's future later, in 409 B.C.

There are also people, especially expectant parents, who refer to the calendar as a guide in naming their sons or daughters. Why the calendar, you may wonder? Well, some calendars indicate the feast days of saints. Thus, some parents use the calendar as the basis for naming their children after saints.

Here are some examples:

January

- 21 St. Agnes
- 28 St. Thomas Aquinas

May

- 1 St. Joseph the Worker
- 30 St. Joan of Arc

June

- 28 St. Irene
- 29 St. Peter and St. Paul

July

- 4 St. Elizabeth of Portugal
- 11 St. Benedict

August

- 29 Beheading of John the Baptist

October

- 4 St. Francis of Assisi

November

- 3 St. Martin de Porres

If a child is born on one of these feast days, his/her parents may name him/her after the saint whose feast day it is.



## Let's Try This

Do you know of other feast days? Check out a calendar that indicates these. Write down the saints and their respective feast days in the space below.

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Aside from what we have discussed so far, the calendar has many other uses and two of these deserve attention. The calendar can be used in family planning as well as in making schedules. These will be discussed in Lessons 3 and 4, respectively.



## **Let's Remember**

The calendar has many practical uses. It can aid you in:

- ◆ calculating people's ages and
- ◆ calculating periods of days, weeks or months before and after an occasion or event.

The calendar is also used:

- ◆ to determine your zodiac sign, and
- ◆ a basis for naming your children according to feast days saints.



## Using the Calendar in Family Planning

Aside from computing a person's age and periods of time before certain occasions such as holidays or paydays, the calendar can likewise be used for family planning.

After studying this lesson, you should be able to:

- ◆ identify the fertile period of a woman to help a couple plan their family and
- ◆ compute the probable birth date of a child using a calendar.



### Let's Read

#### *Using the calendar in family planning*

If a woman wants to get pregnant or is trying to prevent it, the calendar is an effective tool she can use to be able to tell when she should or should not engage in sexual intercourse.

This is because there are certain days that a couple can have sex with the assurance that the wife will or will not get pregnant.

Look at the calendar below.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1*	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

\*First day of the menstrual period

#### *If the wife does not want to get pregnant...*

the couple should *not* have sex beginning on the ninth day after the first day of the wife's menstrual period.

If the wife's menstrual period is regular it would be easier to determine this. A regular menstrual period means that the menstrual cycle about the same time every month.

Let us assume that the first day of the woman's menstrual period falls on the first day of the month (the date in the calendar marked with an asterisk\*).

If the wife does not want to get pregnant, she should avoid engaging in sexual intercourse from the 10<sup>th</sup> to the 20<sup>th</sup> of the month (the shaded days).

How did we get the dates 10 and 20? Simple. First, we add 1 (the first day of the menstrual cycle) and 9 (the number of days after which the fertile period begins). We therefore get 10. Next, we add 10 (the previous number we got) and 10 (the approximate duration of the fertile period). We get 20. Thus, from the 10<sup>th</sup> to the 20<sup>th</sup> of the month, the couple should refrain from sexual intercourse.

The "safe days" or days when the couple can engage in sexual intercourse without the risk of pregnancy will not result in pregnancy are those before the shaded days (before the 10<sup>th</sup>) and after the shaded days (from the 21<sup>st</sup> onwards).

#### ***If the wife wants to get pregnant...***

the couple should engage in sexual intercourse beginning on the ninth day after the first day of her menstrual period (the shaded days). This means that the couple should have sex anytime from the 10<sup>th</sup> to the 20<sup>th</sup> of the month.

The woman at this stage is *fertile* and is therefore likely to get pregnant.



### **Let's Remember**

Couples who want to prevent a pregnancy *should not engage* in sexual intercourse beginning on the ninth day after the first day of the wife's menstrual period. On the other hand, couples who desire a pregnancy *should engage* in sexual intercourse during these days. This is only applicable, however, if the woman has a regular cycles.

But what if the woman's cycle is irregular?

It is harder for women who have an irregular menstrual cycles. A woman should remember when her monthly period begins. This should be marked and studied for a whole year to determine the pattern. **In general, the calendar method of family planning is not applicable when the woman has an irregular menstrual cycle.**





## Let's Try This

Try to chart the menstrual cycle of any adult female relative or friend.

Here's a calendar to help you out. Just write the numbers in the appropriate boxes.

Month \_\_\_\_\_

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

After completing the calendar above, identify the fertile days of your female realative or friend.

To check your work, compare the calendar you have completed with the sample calendar below. The dates of the menstrual cycle in your calendar will of course be different, but you can use this sample calendar as a guide.

Month—October 2000

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5*	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

\*First day of menstrual period

The woman is fertile from the 14<sup>th</sup> to the 24<sup>th</sup> of the month. We get 14 by adding 5 (first day of menstrual cycle) and 9. We get 24 by adding 14 and 10.



## Let's Review

1. Felix and Rosa do not want to have a child yet. Assuming that Rosa's menstrual period is regular and the first day of her period falls on a Saturday, the 7<sup>th</sup> of the month (see the calendar on page 25), when should the couple *not* engage in sexual intercourse?  
\_\_\_\_\_
2. What if they want to have a child? When should they engage in sexual intercourse?  
\_\_\_\_\_

Check your answers against those in the *Answer Key* on page 48.

Did you get the answers right? If yes, proceed to the next discussion. If not, go back and study carefully what we have discussed so far on family planning.



## Let's Study and Analyze

### *Determining the probable date of birth using the calendar*

Aside from being used to determine the days when a woman is fertile, the calendar can also be used to determine the likely birth date of a child. In medical terms, this is known as the EDD or expected due date.

We know that a mother carries a baby in her womb for nine months. But how can a pregnant woman calculate when her baby is likely to be born?

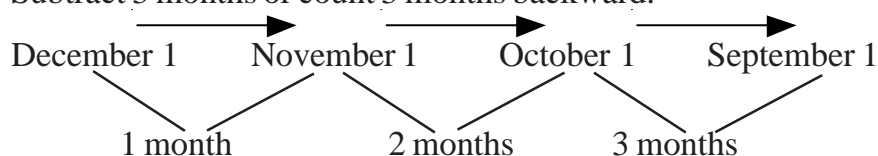
Here's the formula: From the first day of her last menstrual period (or LMP), subtract three months (or count three months backwards) and add 7 days.

For example:

Aling Rosie is pregnant. The first day of her last menstrual period was on the first day of December. When will she give birth?

To solve:

- a. LMP: December 1
- b. Subtract 3 months or count 3 months backward.



c. Add seven days.

$$\begin{array}{r} \text{September } 1 \\ + 7 \text{ days} \\ \hline \text{September } 8 \end{array} \quad \text{birth date of the baby}$$

Now try computing on your own.



## Let's Review

If Mary is pregnant and the first day of her last menstrual period was May 19, when is she likely to give birth?

Do you think you got it right? Check your answer using the *Answer Key* on page 49.

Remember that the expected due date is only an estimate. The formula is meant to determine the likely birth date of the baby. In some cases, the actual birth date can be earlier or later by a few days. The EDD is computed simply to make you aware of the approximate time a baby will be born and to aid you in preparing for the event.

Aside from its importance in plotting dates for family planning and determining the likely birth date of a child, the calendar is also a useful tool in making schedules. We will discuss this in the next lesson.



## Let's Remember

- ◆ For family planning, the calendar is useful in marking the days when a couple should or should not engage in sex, depending on whether they would like to have a child or not at that time.
- ◆ If the couple does not intend to have a child yet, they should not engage in sexual intercourse beginning on the ninth day after the first day of the wife's last menstrual period. The fertile period lasts for about 10 days. But if the couple intends to have a child, they should engage in sexual intercourse during these days.
- ◆ The calendar can be used in approximating the birth date of a child. The formula followed is : Last Menstrual Period (LMP) – 3 months + 7 days.

## Using the Calendar in Making Schedules

So far, we have discussed various uses of the calendar. But we are not quite finished yet. The calendar is also useful in making schedules. Can you imagine a schedule with no dates in it?

After studying this lesson, you should be able to:

- ◆ create a schedule of activities or appointments using the calendar and
- ◆ create a schedule for the implementation of a project using a calendar.



### Let's Think About This

What do we make schedules or plans for? Check the activities below which you plan for or schedule using the calendar.

- ☐ Traveling
- ☐ Weddings and other occasions
- ☐ Appointments
- ☐ Trainings/Seminars
- ☐ Implementation of certain projects or tasks
- ☐ Others (specify): \_\_\_\_\_

Chances are you checked all the items above. Perhaps you even thought of more activities involving the use of a calendar. Why? Simply because the calendar is very useful in planning many different activities.



### Let's Try This

Fill up the one-week calendar on the next page. Write the important things that you plan to do each day.

20 Sun	21 Mon	22 Tues	23 Wed	24 Thurs	25 Fri	26 Sat
Things to do:						

What benefits can you get from making a schedule like this?

Look at what I did for myself.

20 Sun	21 Mon	22 Tues	23 Wed	24 Thurs	25 Fri	26 Sat
Things to do:						
Meet with Nina	Encash check in the bank	Pay electricity bill	Attend Barangay Assembly meeting (7:00 p.m.)	Confirm attendance for Saturday party	Watch favorite movie on TV (8:00 p.m.)	Attend Farah's party

By making this personal schedule for the whole week, I will be reminded of the things that I need to do. This will give me the assurance that I will not forget anything important.

I can also clearly see in the schedule if I am free to have other appointments. On my calendar, I have no special appointment before 7 p.m. on Wednesday, so in case something comes up, I can still put it in my schedule.

Some people are busier than others. Their schedules can be so tight that sometimes they can no longer attend to any extra tasks or activities.

How do you think they manage their schedules?





## Let's Try This

Let us assume that you are an office secretary. Last week, your boss, Mr. Roberts, asked you to put the following on his schedule for this week. Put the following items in the calendar below.

June 5 – Meeting with Mrs. Co, 3:00 p.m.

June 5 – Meeting with Mr. Fernandez, 10:00 a.m.

June 7 – Lunch with Atty. Gomez, 11:30 a.m. to 3:00 p.m.

June 7 – Appointment with doctor, 3:00 to 4:00 p.m.

June 8 – Presentation, Kowloon Hotel, 10:00 a.m.

June 9 – Meeting with management of JJ Corporation, 9:00 to 12:00 a.m.

June 9 – Meeting with staff in the morning, 9:00

4 Sun	5 Mon	6 Tues	7 Wed	8 Thurs	9 Fri	10 Sat

Your calendar should look something like this.

4 Sun	5 Mon	6 Tues	7 Wed	8 Thurs	9 Fri	10 Sat
	Meeting with Mr. Fernandez, 10:00 a.m.  Meeting with Mrs. Co, 3:00 p.m.		Lunch with Atty. Gomez, 11:30 a.m. to 3:00 p.m.  Appointment with doctor 3:00 to 4:00 p.m.	Presentation, Kowloon Hotel, 10:00 a.m.	Meeting with staff, 9:00 a.m.  Meeting with management of JJ Corporation, 9:00 to 12:00 a.m.	

What did you notice about Mr. Roberts' schedule?

Did you notice that some of his scheduled appointments are in conflict with each other? Some of his activities are scheduled on the same day and at the same time so he may have problems meeting his appointments on time.



### Let's Try This

Identify which days in Mr. Roberts' schedule have conflicting appointments. Why are there conflicts?

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Check your answers against those in the *Answer Key* on page 49.

As the secretary, it will be your job to inform Mr. Roberts about his conflicting appointments.



### Let's Think About This

What do you think would happen if Mr. Roberts were not informed about his problematic schedule?

Mr. Roberts could lose important business opportunities if he would not be able to attend some of his appointments. This tells you the important role the calendar plays in scheduling appointments or events.

Without the calendar, you will not readily see or realize that you may be scheduling several events at the same time on the same day. By plotting the appointments on a calendar, you can find alternatives. Look at the calendar again and you will see that, Mr. Roberts has no appointment for Tuesday. Some of his schedules may therefore be transferred to Tuesday.



### Let's Try This

Now, what if you are going to make a schedule for a long-term activity, say your wedding? Most wedding experts claim that the planning should begin five to six months earlier. For example, if your wedding will be on the last week of June, begin arranging your schedule in January. Use the given calendar as your guide for writing your schedule of activities.

<b>JANUARY</b> <b>S M T W T F S</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Write your wedding plans here.
<b>FEBRUARY</b> <b>S M T W T F S</b>  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	
<b>MARCH</b> <b>S M T W T F S</b>  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
<b>APRIL</b> <b>S M T W T F S</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	
<b>MAY</b> <b>S M T W T F S</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	
<b>JUNE</b> <b>S M T W T F S</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	

Do you think you came up with a good schedule for your wedding? Compare your schedule with mine.

January	1 <sup>st</sup> week (2 to 8) decide on the date and budget	2 <sup>nd</sup> week (9 to 15)
	3 <sup>rd</sup> week (16 to 22)	4 <sup>th</sup> week (23 to 29) identify and coordinate with the church
February	1 <sup>st</sup> week (Jan. 30 to Feb. 5) prepare the necessary documents for the church	2 <sup>nd</sup> week (6 to 12) identify sponsors
	3 <sup>rd</sup> week (13 to 19) submit documents to the church	4 <sup>th</sup> week (Feb. 27 to March 4) pick out the place for the reception, make reservations
March	1 <sup>st</sup> week (5 to 11) pick out a gown or start coordinating with the designer for the bride's gown and those of the sponsors	2 <sup>nd</sup> week (12 to 18) Choose a cake designer and discuss the design of the wedding cake
	3 <sup>rd</sup> week (19 to 25) prepare the invitations	4 <sup>th</sup> week (March 26 to Apr. 1) choose a florist and discuss the floral arrangement
April	1 <sup>st</sup> week (2 to 8) prepare the giveaways	2 <sup>nd</sup> week (9 to 15) select a wedding photographer and discuss costs and pictorial arrangements
	3 <sup>rd</sup> week (16 to 22) send out invitations	4 <sup>th</sup> week (23 to 29) prepare wedding ceremony accessories, e.g., ring, cord, veil, candles, etc.
May	1 <sup>st</sup> week (Apr. 30 to May 6) finalize the reception arrangements	2 <sup>nd</sup> week (7 to 13) coordinate with make up artist
	3 <sup>rd</sup> week (14 to 20)	4 <sup>th</sup> week (21 to 27)
June	1 <sup>st</sup> week (May 28 to June 3) confirm attendance of guests	2 <sup>nd</sup> week (4 to 10) confirm instructions with the baker, and the florist and the photographer.
	3 <sup>rd</sup> week (11 to 17)	4 <sup>th</sup> week (18 to 24) wedding day

What do you think of my schedule? Do you think this kind of schedule will help me create the perfect wedding?

Great weddings require preparation. Preparation and planning will help the bride and groom avoid cramming. If you are going to get married, you wouldn't want your gown or your suit half-sewn a day before the wedding, right? Scheduling your activities will make the wedding preparations more organized. This way, activities that need preparation can be arranged in proper time.



## Let's Try This

Write down your observations about the schedule of activities I presented.

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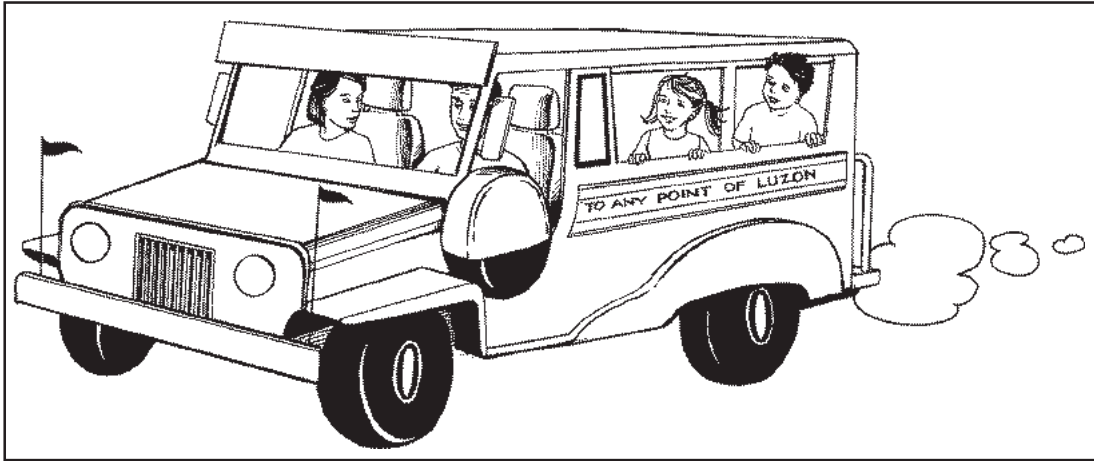
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Did you notice that . . .

- ◆ all planned activities were written down?
- ◆ the person/persons responsible for the activities were indicated?
- ◆ the specific dates covered by the activities were identified?

Now, let's say that you and your family are going on a family outing in Batangas. You plan to rent a jeepney and stay at a beach house. Write down your schedule for this trip in the space provided.

Compare your schedule with mine.



### *Three Weeks Before*

- ◆ look for a nice beach house where my family can stay
- ◆ compare the rates; ask for promos or possible discounts; look at amenities
- ◆ inform family members about the data I have gathered
- ◆ ask my family for their opinions and decide together
- ◆ make the necessary reservations

### *Two Weeks Before*

- ◆ ask around for vehicles that can be rented
- ◆ ask for the rates and possible discounts
- ◆ make reservations

### *One Week Before*

- ◆ Purchase all necessary items to bring like water, clothing, and food.

### *Four Days Before*

- ◆ check if I have everything ready

### *Two Days Before*

- ◆ call the resort to confirm reservations
- ◆ confirm the jeepney reservation

You may have come up with a different schedule, but what's important is for you to make sure that the time frame and activities are specified.

If your schedule is properly communicated to everyone involved, it will...

- ◆ ensure that everyone is aware of the timetable for certain projects/activities;
- ◆ ensure that each step/activity is given ample time to be finished; and
- ◆ ensure that the job will be done at the designated time.



## Let's Read

In making a schedule, the following tips may be useful.

1. Be realistic. Do not schedule an activity to be done in one day when you are aware that it will take about a week to do.
2. Consider the requirements for these activities. For example, a scheduled meeting will require coordination among those who will be in the meeting. This coordination will be an additional task.
3. Consider the energy level of the people involved. A person's energy level decreases as he/she gets tired. Remember that even if a day is made up of 24 hours, a person needs at least 8 hours of rest.
4. Make sure that everyone concerned is aware of the timetable being followed.
5. Check the individual schedules of everyone involved. Do not assume that all the people involved will always be available.
6. If you are the one assigned to prepare the schedule, make sure that you understand all that is required for the activity or task.



## Let's Review

What time (day or month) is being referred to in each statement?

1. The meeting will be on the third working day of the week.
2. Your bonus will come at the end of January.
3. You will have to work overtime for the first half of May.
4. Sales were bad during the second quarter of the year.

Check your answers against those in the *Answer Key* on page 49.

If you are asked to make a schedule, make sure that you understand the directions given about the activities involved. Remember that most schedules run for a certain period of time, so if you get one of the dates wrong, everything else that follows will likely be wrong too.



## Let's Try This

Volunteer to schedule the activities or projects for one of your friends or relatives, (e.g., say a house renovation or a planting activity). Distribute copies of the schedule you made to everyone involved in the project. Have them check and comment on the schedule you prepared.

If they have many objections about the schedule, work on it again until everyone is satisfied.



## Let's Remember

- ◆ The calendar is useful in preparing schedules for events and making timetables for certain tasks.
- ◆ In making schedules, make sure that:
  - all activities involved are written;
  - the person/s responsible for the activities are indicated; and
  - the specific dates and/or time periods covered by the activities are identified.





## Let's Sum Up

Do not forget the highlights of this module.

- ◆ A decade is equivalent to 10 years, a century to 100 years and a millennium to 1,000 years.
- ◆ B.C. stands for “Before Christ,” while A.D. stands for “Anno Domini” or the years after Christ was born.
- ◆ We are currently using the Gregorian calendar.
- ◆ You can use the calendar to calculate ages and the number of days, weeks or months before and after an occasion.
- ◆ The calendar can be used in marking the days when a couple involved in family planning should or should not engage in sexual intercourse.
- ◆ The calendar can be used to approximate the birth date of a coming child. The formula followed is: Last Menstrual Period (LMP) - 3 months + 7 days.
- ◆ The calendar can be used to make schedules for appointments and activities. It can also serve as a timetable to complete projects or assignments.



## What Have You Learned?

Encircle the letter of the correct answer.

1. A millennium is equivalent to \_\_\_\_\_ decades.
  - a. 100 decades
  - b. 10 decades
  - c. 1,000 decades
  - d. 12 decades
2. Which months have 31 days?
  - a. January, March, May, July, August, October and December
  - b. February, April, June, September, November and December
  - c. January, March, April, October and December
  - d. July, August, September, October, November and December
3. 7 A.D. means \_\_\_\_\_.
  - a. 7 days after creation
  - b. 7 months after Christ was born
  - c. 7 years before Christ was born
  - d. 7 years after Christ was born

4. B.C. stands for \_\_\_\_\_.  
a. Before Conception                      c. Before Christianity  
b. Before Christ                              d. Before the Calendar
5. During a leap year, \_\_\_\_\_.  
a. we add a day to January  
b. February has 28 days  
c. we add another day to February  
d. we subtract a day from February
6. If Henry's birthday is on June 5, 1976, how old would he be by New Year's Day of 2002?  
a. 25 years, 7 months and 26 days old                      c. 25 years, 6 months and 26 days old  
b. 26 years, 6 months and 27 days old                      d. 26 years, 6 months and 26 days old
7. If today is December 25, how many more days are there before Valentine's Day?  
a. 51 more days                                      c. 49 more days  
b. 52 more days                                      d. 55 more days
8. Joan's father left to work abroad on January 5. If today is July 10, how many weeks and days (if any) have passed since Joan's father left?  
a. 24 weeks  
b. 26 weeks and 2 days  
c. 26 weeks and 4 days  
d. 27 weeks
9. If a pregnant wife's last menstrual period was on June 3, when is her approximate due date?  
a. March 3 of the next year                      c. March 10 of the next year  
b. February 10 of the next year                      d. February 3 of the next year
10. If the first day of the wife's menstrual period was June 3, when should the couple engage in sexual intercourse if they want to have a child?  
a. June 12–22                                      c. June 13–23  
b. June 11–21                                      d. June 10–20
11. Refer to your answer to Question 10. Why should the couple engage in sexual intercourse during this period?  
a. because the woman is fertile during this period  
b. because this is the lucky period according to the calendar  
c. because the man is fertile during this period  
d. none of the above

12. In making a schedule, you should \_\_\_\_\_.
- a. make sure that all activities are plotted in the calendar
  - b. consider the energy level of the people involved
  - c. consider the schedules of the people involved
  - d. all of the above

Compare your answers with those in the *Answer Key* on pages 49 to 52.

If you got:

- 0 – 5      You should study the module again.
- 6 – 7      You need to go back to the parts of the module that you did not understand.
- 8 – 9      Good! Just go back to the items that you missed.
- 10 – 12    Very good! You have learned a lot from this module. You may now proceed to the next one.



## Answer Key

### A. Let's See What You Already Know (pages 2–3)

- (d) January, March, May, July, August, October and December have 31 days. The rest have 30 days except for February which usually has 28 days.
- (b) This is referred to as *revolution*.
- (c) The calendar we are using today is the Gregorian calendar. It replaced the Julian calendar in 1582 A.D.
- (a) An additional day is added to February every four years.
- (d) The calendar has many practical uses. Anything that has to do with dates involves the use of the calendar.
- (c)

*To illustrate:*

Put the dates in number form.

	Year	Month	Day
Base date	2001	02	14
Jessa's birth date	1989	06	05

Notice that in the month column, 06 cannot be subtracted from 02. Transfer 1 year from the year column to the month column. Then subtract.

	Year	Month	Day
Base date	2001	02 + 12	14
	– 1 year	months	
	2000	14	14
Jessa's birth date	– 1989	– 06	– 05
	11	08	09

Jessa will be 11 years, 8 months and 9 days old on February 14, 2001.

- (d)

*To illustrate:*

$$\begin{array}{rcl}
 \text{January} & & 31 \text{ days} \\
 \text{February} & & 14 \text{ days} \\
 \hline
 & & 45 \\
 & & - 1 \\
 \hline
 & & 44
 \end{array}$$

There are 44 more days before February 14.

8. (a)

*To illustrate:*

$$\begin{array}{rcl}
 2 & \text{first day of menstrual period} & \\
 + 9 & \text{days after the first day of menstrual period} & \\
 \hline
 11 & \text{start of the woman's fertile period} & \\
 + 10 & \text{more days covered by the woman's fertile period} & \\
 \hline
 21 & \text{end of the woman's fertile period} & 
 \end{array}$$

The woman is fertile from the 11<sup>th</sup> to the 21<sup>st</sup> days of the month. If the couple does not want to have children, they should avoid sexual intercourse during this period.

9. (d) Same as number 9 since this is the fertile period.

10. (b) March 23 of the next year.

*To illustrate:*

$$\begin{array}{rcl}
 \text{June 16} & \xrightarrow{\text{(3 months backward)}} & \text{March 16} \\
 & & + 7 \text{ days} \\
 & & \hline
 & & \text{March 23}
 \end{array}$$

11. (c) The first half refers to September 1 to 15 so the next half would refer to the 16<sup>th</sup> through the 30<sup>th</sup>.

## B. Lesson 1

*Let's Try This (page 5)*

1. 24
2. 7
3. 28 to 31
4. 12

*Let's Review (page 8)*

1. 2041 to 2050
2. 2021 to 2030
3. 2031 to 2040
4. 2061 to 2070

*Let's Review (page 11)*

1. 10 years
2. 100 years (century)  $\div$  10 years (decade) = 10 decades
3. 1,000 years (millennium)  $\div$  100 years (century) = 10 centuries

*Let's Try This (page 11)*

$$\begin{array}{rcl}
 2000 & \text{year today} & \\
 + 340 & \text{base date (340 B.C.)} & \\
 \hline
 2340 & \text{years that have passed since 340 B.C.} & 
 \end{array}$$

*Let's Review (page 12)*

Year 2004

*To illustrate:*

2000 leap year

+ 4 years

2004 next leap year

## C. Lesson 2

*Let's Solve This Problem (page 18)*

**STEP 1: What are the given data?**

January 10, 1988 – Gina's birth date

November 28, 2000 – birthday of Gina's mom

**STEP 2: Number the months based on their order.**

January	– 01	July	– 07
February	– 02	August	– 08
March	– 03	September	– 09
April	– 04	October	– 10
May	– 05	November	– 11
June	– 06	December	– 12

**STEP 3: Convert the given dates into numbers, starting off with the year.**

		Year	Month	Day
Gina's birth date	January 10, 1988	1988	01	10
(Base date) Birthday of Gina's mom	November 28, 2000	2000	11	28

**STEP 4: Subtract the birth date from the base date.**

		Year	Month	Day
(Base date) Birthday of Gina's mom	November 28, 2000	2000	11	28
Gina's birth date	January 10, 1988	-1988	-01	-10
ANSWER		12	10	18

**Gina will be 12 years, 10 months and 18 days old by her mom's birthday.**

*Let's Solve This Problem (page 20)*

**STEP 1:**     **Let's write down the number of days for each of the months from August to December.**

August	31
September	30
October	31
November	30
December	31
January	1 (New Year)

**STEP 2:**     **Add the number of days of the months.**

August	31	
September	30	
October	31	
November	30	
December	31	
January	$\begin{array}{r} + 1 \\ \hline \end{array}$	(New Year)
	154	

**STEP 3:**     **Subtract the given day, Aug. 1, 2000.**

August	31	
September	30	
October	31	
November	30	
December	31	
January	$\begin{array}{r} + 1 \\ \hline \end{array}$	(New Year's Day)
	154	
	$\begin{array}{r} - 1 \\ \hline \end{array}$	(for August 1)
	153	

**Answer:** There are 153 days before New Year's Day.

*Let's Review (page 21)*

148 days  $\div$  7 days (1 week) = 21 weeks and 1 day

*Let's Solve This Problem (page 22)*

**STEP 1:**     **Let's write down the number of days from months October to December.**

October	31	
November	30	
December	2	(today)

**STEP 2: Add the number of days of all the months listed.**

October 31  
 November 30  
 December  $+ 2$   
 $\underline{\hspace{1cm}}$   
 63 days

**STEP 3: Subtract the number of days indicated in the given, Oct. 5.**

October 31  
 November 30  
 December  $+ 2$   
 $\underline{\hspace{1cm}}$   
 63 days

$- 5$   
 $\underline{\hspace{1cm}}$

58 days have passed since the arrival of Jose's brother from the US.

To convert this into number of weeks:

$$58 \div 7 = 8 \text{ weeks and } 2 \text{ days}$$

So, a little over 8 weeks have passed since Jose's brother arrived.

## D. Lesson 3

*Let's Review (page 28)*

- The 16<sup>th</sup> through the 26<sup>th</sup> of the month

7 – first day of menstrual period  
 $+ 9$  – days after the first day of Rosal's menstrual period  
 $\underline{\hspace{1cm}}$  16 – start of woman's fertile period  
 $+ 10$  – more days of the fertile period  
 $\underline{\hspace{1cm}}$  26 – last day of the fertile period

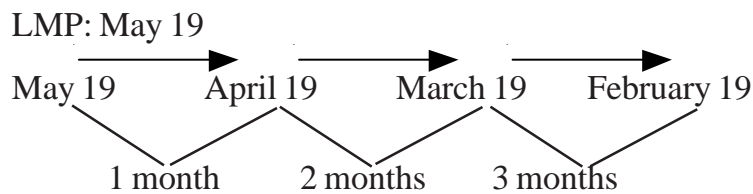
- The 16<sup>th</sup> through the 26<sup>th</sup> of the month. This is the fertile period of the wife for the month. Having sex within this period is likely to result in pregnancy.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7*
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

\* First day of the menstrual period



*Let's Review (page 29)*



Add seven days:

February      19  
+ 7  
February      26      approximate birth date of the baby

The estimated birth date of the baby is February 26.

## **E. Lesson 4**

*Let's Try This (page 34)*

1. On Wednesday, the appointment with the doctor comes immediately after lunch with Atty. Gomez. This may not give Mr. Roberts enough time to travel from one place to another.
2. On Friday, the staff meeting and the meeting with the management of JJ Corporation are scheduled at the same time in the sae morning. Mr. Roberts cannot attend both at the same time.

*Let's Review (page 39)*

1. Wednesday
2. January 31
3. May 1 to 15
4. April, May and June (a quarter of the year is comprised of three months)

## **F. What Have You Learned? (pages 41–43)**

1. (a) A millennium is equivalent to 1,000 years while a decade is equivalent to 10 years.

*To illustrate:*

$$1000 \div 10 = 100 \text{ decades}$$

2. (a) These are the months with 31 days. The rest except February have 30 days. February has 28 days, or 29 days if it is a leap year.
3. (d) A.D. stands for “Anno Domini” or the years after the birth of Christ.
4. (b) If A.D. means after the birth of Christ, B.C. means before the birth of Christ. B.C. stands for “Before Christ.”
5. (c) Every 4 years, a day is added to February. The year when this happens is called a leap year.

6. (c) Henry will be 25 years, 6 months and 26 days old by New Year's Day of 2002.

*To illustrate:*

**STEP 1: Put the dates in number form.**

	Year	Month	Day
Base date (New Year's Day)	2002	01	01
Henry's birth date	1976	06	05

Notice that in the month column, 06 cannot be subtracted from 01. In the day column, 05 cannot be subtracted from 01.

**STEP 2: Distribute 1 year from the year column to the month and day columns, then subtract.**

	Year	Month	Day
Base date	2002	01+ 11 months	01+ 30 days
	↓	↓	↓
	2001	12	31
Henry's birth date	-1976	-06	-05
	25	6	26

**Answer:** Henry will be 25 years, 6 months and 26 days old by New Year's Day of 2002.

7. (a) There are 51 more days before Valentine's Day if today's date is December 25.

*To illustrate:*

December	31	
January	31	
February	14	(Valentine's Day)
	<u>76</u>	
	-25	(date today)
	<u>51</u>	days before Valentine's Day

8. (c) 26 weeks and 4 days have passed since Joan's father left to work abroad.

*To illustrate:*

**STEP 1: Let's write down the number of days from the months January to July.**

January	31
February	28
March	31
April	30
May	31
June	30
July	10

**STEP 2: Add the number of days of all the months.**

January	31
February	28
March	31
April	30
May	31
June	30
July	$\frac{+ 10}{191}$ days

**STEP 3: Subtract the number of days indicated in the given, January 5.**

January	31
February	28
March	31
April	30
May	31
June	30
July	$\frac{+ 10}{191}$ days
	$\frac{- 5}{186}$ (for January 5)

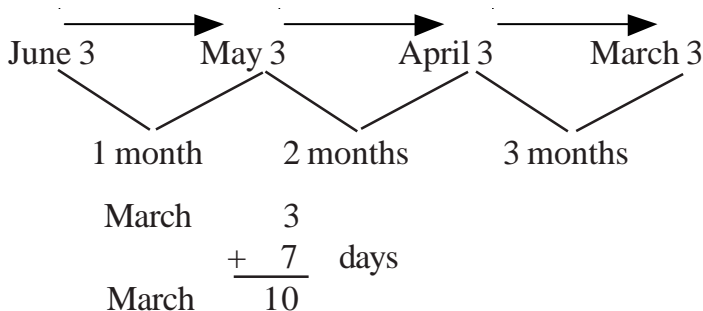
186 days have passed since Joan's father left.

To convert this into number of weeks:

$$186 \div 7 = 26 \text{ weeks and 4 days have passed since Joan's father left.}$$

9. (c) The woman's estimated due date is March 10 of the next year.

*To illustrate:*



10. (a) June 12–22

*To illustrate:*

June	3	first day of menstrual period
	$\frac{+ 9}{12}$	days after the first day of menstrual period
June	12	start of the woman's fertile period
	$\frac{+ 10}{22}$	more days covered by the woman's fertile period
June	22	last day of the woman's fertile period

**Answer:** The woman's fertile period is from June 12 to June 22. If the couple wishes to have a child, they should engage in sexual intercourse during this period.

11. (a) The fertility of the woman is a key factor if the couple wants to have a child.
12. (d) All of the listed items are essential to ensure that your schedule will be executed as planned.



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