Lesson 11

Comparing Money through PhP500

Activity 1

Write >, < or =.

<table>
<thead>
<tr>
<th>Bills and Coins</th>
<th>&gt;, &lt; or =</th>
<th>Bills and Coins</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Coin" /></td>
<td><img src="image2" alt="Coin" /></td>
<td><img src="image3" alt="Coin" /></td>
</tr>
<tr>
<td><img src="image1" alt="Banknotes" /></td>
<td><img src="image2" alt="Banknotes" /></td>
<td><img src="image3" alt="Banknotes" /></td>
</tr>
<tr>
<td><img src="image1" alt="Coins" /></td>
<td><img src="image2" alt="Coins" /></td>
<td><img src="image3" alt="Coins" /></td>
</tr>
</tbody>
</table>
Compare the following amounts using $>, <, =$.

1) PhP45.65 $\underline{\quad}$ PhP50.90
2) PhP97.35 $\underline{\quad}$ PhP100
3) PhP67.00 $\underline{\quad}$ PhP6.75
4) PhP430.30 $\underline{\quad}$ PhP100.50
5) PhP384.56 $\underline{\quad}$ PhP390.05

A. Write the combined amount of each set of bills and coins, and put the correct relation symbol.

<table>
<thead>
<tr>
<th>Bills and Coins</th>
<th>Amount</th>
<th>$&gt;, &lt;, \text{ or } =$</th>
<th>Amount</th>
<th>Bills and Coins</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### B. Teresa’s shop has the following price list of items posted on the wall. Write >, < or = inside the box to make the sentence true.

<table>
<thead>
<tr>
<th>2)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PhP499.00</td>
<td>PhP350</td>
<td>PhP199.95</td>
</tr>
<tr>
<td>PhP190.95</td>
<td>PhP280.75</td>
<td>PhP550.00</td>
</tr>
<tr>
<td>PhP95.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PhP350</td>
<td>PhP199.95</td>
<td>PhP190.95</td>
</tr>
<tr>
<td>PhP280.75</td>
<td>PhP550.00</td>
<td>PhP399.95</td>
</tr>
<tr>
<td>PhP95.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PhP499.00</td>
<td>PhP199.95</td>
<td>PhP190.95</td>
</tr>
<tr>
<td>PhP280.75</td>
<td>PhP550.00</td>
<td>PhP399.95</td>
</tr>
<tr>
<td>PhP95.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Compare the set of items bought by two customers, Lina and Alicia:

1) Lina □ □ □
    Alicia □

2) Lina □
    Alicia □ □ □

3) Lina □ □ □
    Alicia □ □ □
### Activity 4

Use >, <, and = to compare the different denominations of bills and coins.

<table>
<thead>
<tr>
<th>Denominations</th>
<th>&gt;, &lt;, =</th>
<th>Denominations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) four PhP20.00 bills and three PhP10.00 coins</td>
<td></td>
<td>one PhP100.00 bill and two PhP20.00 bills</td>
</tr>
<tr>
<td>2) five PhP50.00 bills and one PhP20.00 bill</td>
<td></td>
<td>one PhP200.00 bill</td>
</tr>
<tr>
<td>3) six PhP20.00 and four PhP50.00 bills</td>
<td></td>
<td>two PhP200.00 and two PhP50.00 bills</td>
</tr>
<tr>
<td>4) four PhP100.00 bills and seven PhP10.00 coins</td>
<td></td>
<td>two PhP200.00 bills</td>
</tr>
<tr>
<td>5) eight PhP50.00 bills and ten PhP5.00 coins</td>
<td></td>
<td>one PhP500.00 bill</td>
</tr>
</tbody>
</table>
Ask for somebody’s help for the prices of the items listed below.

Have 2 separate lists of items which can be bought within the PhP500 budget.

1) 1 big can of sardines = _________________
2) 1 kilo of white sugar = _________________
3) 1 kilo of milk fish = _________________
4) 1 kilo of cabbage = _________________
5) 1 bottle of peanut butter = _________________
6) 1 kilo of rice = _________________
7) 1 kilo of onion = _________________
8) 1 liter of cooking oil = _________________
9) 1 can of condensed milk = _________________
10) 1 kilo of chicken = _________________
Comparing Money through PhP1 000

Get different denominations of Philippine bills and coins and compare their amounts. Were you able to do it?

Activity 1

Write at least four different combinations of bills amounting to PhP1 000.

1) ________________________________________________
2) ________________________________________________
3) ________________________________________________
4) ________________________________________________
Work together.

Situation: A customer handed a PhP1,000 bill.

List all possible bills and coins to answer the problems given.

1) Use bills and coins to make change for a customer who buys an umbrella worth PhP589.

2) Use coins and bills to make change for a customer who buys a bag worth PhP728.75.

Write the amount of the given money in your notebook and compare them using <, > or =.

1) Which amount is lesser? _____________________________
Which amount is more? _____________________________

Activity 4

How many pieces of the following denominations are equal to PhP1 000.00?

1) PhP1.00
2) PhP10.00
3) PhP100.00
4) PhP200.00
5) PhP500.00
Answer the following:

1) Explain how a cashier/seller might make change for your thousand-peso bill, if you buy a pair of slippers worth PhP99.75.

2) Interview a sari-sari store vendor and ask the prices of the following items. Compare the prices using the symbol <, > or = in your notebook.

   a. 25 g powdered juice  ___  33 g powdered milk
   b. 1 liter vinegar  ___  1 liter soy sauce
   c. a kilo of rice  ___  a kilo of sugar
Addition of 3- to 4-Digit Numbers without Regrouping

Activity 1

Write your answers on your paper.

1) 8447
2) 1103
3) 3010

1130
3210
1102
+5110
+4030
+5221

Activity 2

Answer each question below. Use the chart.

Enrolment at Gen. Gregorio del Pilar Elementary School

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1411</td>
<td>2101</td>
<td>2121</td>
</tr>
<tr>
<td>II</td>
<td>1210</td>
<td>1122</td>
<td>1234</td>
</tr>
<tr>
<td>III</td>
<td>2034</td>
<td>2221</td>
<td>2333</td>
</tr>
</tbody>
</table>

1) What is the total enrolment of Grade I from 2011 - 2012? _____
2) How many pupils were enrolled in Grade II from 2010 – 2012? ______
3) How many pupils were enrolled in Grade III from 2010 – 2012? ______
4) What is the total enrolment of Grades I, II, III?
   a. in 2010 ______
   b. in 2011 ______
   c. in 2012 ______
5) Which school year has the biggest enrolment? ______

Activity 3

Write in column. Then, find the sum.

1) 3052, 4614, 1231
2) 5143, 1705, 2030
3) 1672, 3104, 4123
4) 6084, 1703, 2112
5) 5416, 1370, 1003
Look at the pictures in the box and then answer the questions that follow on your paper. Use the legend below.

Legend/equivalent:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

1) How many rubber bands are there in all?  
2) How many cars are there?  
3) How many airplanes are there?  
4) How many balls, rubber bands, cars, and airplanes are there in all?
Lesson 14

Adding 3- to 4-Digit Numbers with Regrouping

Activity 1

Write the letter of your answer on your paper.

1) \[1 447 + 1 127\]
   a. 2288   b. 2 287   c. 2 297   d. 2 574

2) \[3 254 + 437\]
   a. 3 691   b. 3 681   c. 36 811   d. 4 691

3) \[4 453 + 1 293\]
   a. 5 646   b. 56 146   c. 5 756   d. 5 746

4) \[6 487 + 2 332\]
   a. 8 719   b. 8 819   c. 87 119   d. 8 818
5)  
\[
\begin{array}{c}
5 768 \\
+ 1 219 \\
\hline
\end{array}
\]
\[\text{a. 6 987} \quad \text{b. 6 977} \quad \text{c. 6 988} \quad \text{d. 69 717}\]

Look at the number chart below. Each letter has an equivalent number of points. Find out the total number of points for a word.

Example:

\[
\begin{array}{ll}
P &= 1 621 \\
E &= 234 \\
N &= 565 \\
\end{array}
\]

\[2 420 \text{ points}\]

1) Find the number of points for the following words:
   a. low  
   b. was  
   c. pan  
   d. bake  
   e. pool  

2) Form two words out of the letters in the chart. Find the number of points for each word.
Activity 3

Find the sum.

1) 1 284
   + 3 126
   = 4 410

2) 1 426
   + 2 729
   = 4 155

3) 8 216
   + 3 252
   = 11 468

4) 3 805
   + 2 996
   = 6 801

5) 2 743
   + 1 032
   = 3 775

Activity 4

Read the problems carefully, then solve. Show your solutions.

1) What is the sum of 1 492 and 287?
2) What is 3 827 increased by 138?
3) What is 5 335 more than 2 138?
4) If the addends are 4 563 and 2 154, what is the answer?
5) What is the total of 2 293 and 3 424?
6) A table costs PhP2 540.00. A chair costs PhP1 520.00. If a bed costs PhP500.00 more than the costs of the table and the chair combined, how much does a bed cost?
Use the menu to answer the questions below.

**SSES School Canteen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sopas</td>
<td>PhP25.00</td>
</tr>
<tr>
<td>Pansit</td>
<td>PhP20.00</td>
</tr>
<tr>
<td>Puto</td>
<td>PhP5.00</td>
</tr>
<tr>
<td>Sandwich</td>
<td>PhP15.00</td>
</tr>
<tr>
<td>Boiled Egg</td>
<td>PhP8.00</td>
</tr>
<tr>
<td>Milk</td>
<td>PhP10.00</td>
</tr>
<tr>
<td>Hot Chocolate</td>
<td>PhP15.00</td>
</tr>
<tr>
<td>Orange Juice</td>
<td>PhP10.00</td>
</tr>
<tr>
<td>Pineapple Juice</td>
<td>PhP10.00</td>
</tr>
</tbody>
</table>

1) How much will Mark pay for sopas, boiled egg and milk?
2) How much will Anna spend for pansit, puto and hot chocolate?
3) Lita has a 20-peso bill and a 5-peso coin. Can she have a pansit, puto and pineapple juice for snack? Why?
4) What is the biggest amount that Eric can spend for his snacks of 3 food items?
Estimating Sums

**Activity 1**

Round off the addends to its highest place value then estimate the sum.

1) \[ 8447 \quad + \quad 466 \]
2) \[ 7688 \quad + \quad 469 \]
3) \[ 4457 \quad + \quad 436 \]
4) \[ 6234 \quad + \quad 3455 \]
5) \[ 2272 \quad + \quad 6456 \]

**Activity 2**

Round off the addends then estimate the sum.

1) \[ 1198 \quad + \quad 981 \]
2) \[ 4567 \quad + \quad 735 \]
3) \[ 4210 \quad + \quad 3876 \]
4) \[ 2080 \quad + \quad 1750 \]
5) \[ 6275 \quad + \quad 2289 \]

Check your estimate by getting the actual sum. Which of the estimates are good? Why? Which are not? Why?
Activity 3

Read the given situation below. Then answer the questions that follow.

The photocopy shop near the school recorded the following number of pieces of bond paper it used for five days.

<table>
<thead>
<tr>
<th>Day</th>
<th>Number of pieces of bond paper used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>2 342</td>
</tr>
<tr>
<td>Tuesday</td>
<td>2 422</td>
</tr>
<tr>
<td>Wednesday</td>
<td>883</td>
</tr>
<tr>
<td>Thursday</td>
<td>1 912</td>
</tr>
<tr>
<td>Friday</td>
<td>811</td>
</tr>
</tbody>
</table>

1) About how many pieces of bond paper were used on Monday and Tuesday?
2) What is the estimated number of pieces of bond paper that were used on Wednesday and Thursday?
3) About how many pieces of bond paper were used on Thursday and Friday?
4) What are the estimated sums of pieces of bond paper used on the following days?
   a. Monday and Friday
   b. Tuesday and Thursday
5) a. How many pieces of bond paper were actually used in all from Monday to Friday? b. What is the estimated sum?
Read and solve the problems.

The chain of stores owned by three brothers earns these amounts in a day.

<table>
<thead>
<tr>
<th>Store</th>
<th>Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store A</td>
<td>PhP6 446</td>
</tr>
<tr>
<td>Store B</td>
<td>PhP4 567</td>
</tr>
<tr>
<td>Store C</td>
<td>PhP8 983</td>
</tr>
</tbody>
</table>

1) About how much do the three stores earn in one day?
2) What is the actual total earnings of Store A and Store B?
3) What is the estimated sum of earnings of store A and store C?
4) What is the estimated total earnings of Store B and Store C?
5) Which store earns more in a day? What is the estimated earning?
Lesson 16

Adding 1-to 2-Digit Numbers without and with Regrouping

Suppose you buy a tetra pack of juice and biscuit from a store, do you ever take time to add mentally how much you will pay the storekeeper?

Activity 1

Give the sum orally.

1) 12 + 14
2) 23 + 32
3) 41 + 23
4) 32 + 12
5) 38 + 23
Read and solve the problems without using paper and pencil.

1) 24 blue balls
   16 black balls
   How many balls in all?

2) Elmer has 33 stickers.
   Romy has 27 stickers.
   How many stickers do they have in all?

3) 20 ripe mangoes
   18 unripe mangoes
   How many mangoes in all?

4) 23 red ballpens
   16 black ballpens
   How many ballpens in all?

5) 36 shoulder bags
   14 school bags
   How many bags in all?

Add the following without using paper and pencil.

1) 22 + 12 =
2) 30 + 22 =
3) 27 + 15 =
4) 28 + 12 =
5) 58 + 24 =
Copy the letter of the answer to the exercises without using paper and pencil. Connect the number sentences to their sums.

1) 2) 3) 4) 5)

A  
B  
C  
D  
E
Activity 1

Add the following addends mentally.

1) 400 + 50 = ________  
2) 700 + 10 = ________  
3) 800 + 90 = ________  
4) 300 + 20 = ________  
5) 300 + 300 = ________  
6) 300 + 70 = ________  
7) 600 + 50 = ________  
8) 800 + 10 = ________  
9) 400 + 40 = ________  
10) 500 + 200 = ________

Activity 2

Do the following mentally. Give your answers orally.

1) 80 + 10 = ________  
2) 40 + 30 = ________  
3) 50 + 40 = ________  
4) 60 + 200 = ________  
5) 20 + 200 = ________  
6) 300 + 30 = ________  
7) 500 + 90 = ________  
8) 600 + 80 = ________  
9) 500 + 400 = ________  
10) 600 + 300 = ________
Lesson 18

Solving Routine Problems involving
Addition

Every day you experience situations that call for solving problems, no matter how simple they are. You may not know it but these situations help you become creative in solving problems.

Solve the problem on your paper.

1) During the flag ceremony there were 1,224 boys and 822 girls lined up in the school ground. How many pupils joined the flag ceremony?

2) A mango orchard yielded 3,545 mangoes last year and 3,618 this year. How many mangoes did the mango orchard yield in two years?

3) In October, Ramon opened a savings account with an initial deposit of PhP5,000.00. Last month he deposited PhP3,700.00. How much money does he have in his savings account?
Analyze and solve the problems.

1) Mr. Cruz harvested pineapples in two weeks. On the first week, he harvested 2,334 pineapples and 1,248 pineapples on the second week. How many pineapples were harvested in all?

2) Mr. Pura gathered 3,445 coconuts in his farm, while Mr. Flores gathered 2,766. How many coconuts did they gather in all?

1) Nicole and Ana are sisters. Ana saved PhP157 from her allowance in a week and Ana saved PhP118. How much is their combined savings in a week?

2) A poultry farm owner delivered 3,420 eggs to supermarkets, 3,456 to a public market and had 1,240 eggs left. How many eggs did the farm owner deliver in all?
Analyze and solve the following problems. Draw an illustration for each problem.

1) Ena sold 1 007 tickets for the cultural show last year. She sold 2 009 tickets this year. How many tickets did she sell in two years?
2) A bookstore owner earned PhP3 675.00 from the books she sold yesterday. Today she earned PhP4 399.00 How much did the owner earn from the books sold?

Solve the problems mentally. Write your answer on your paper.
1) What is 200 more than 700?
2) What is 400 increased by 850?
3) Cherry sold 20 sticks of banana cue in the morning and 30 sticks more of banana cue in the afternoon. How many sticks of banana cue did she sell?
4) Clifford has 30 blue marbles and 20 green marbles. His friend gave him 12 green marbles more.
   a. How many marbles does he have now?
   b. Which of the colored marbles does he have more?
   c. During her birthday, Chinchin bought 32 slices of buko pie and 40 slices of egg pie for her classmates. Are the slices of buko and egg pies enough for all her classmates, which are 25 boys and 38 girls? Why?
Solve each problem without the use of paper and pencil.

1) Ms. Ofel gathered 300 straws last week and 200 more this week for her mathematics project. How many straws did she gather in all?

2) Mer, one of the pupils of Ms. Ofel, was able to collect 500 bottle caps. His classmate gave him 80. How many bottle caps does he have altogether?
Find out if the sums of the numbers in any row and column is always the same. Do this on your paper.

1)  
\[
\begin{array}{ccc}
12 & 6 & 13 \\
5 & 5 & 11 \\
4 & 20 & 7 \\
\end{array}
\]

2)  
\[
\begin{array}{ccc}
33 & 28 & 35 \\
34 & 32 & 30 \\
29 & 36 & 31 \\
\end{array}
\]

3)  
\[
\begin{array}{ccc}
15 & 54 & 49 \\
51 & 47 & 20 \\
52 & 17 & 49 \\
\end{array}
\]
Arrange the scrambled digits in the circles to make an addition sentence. Let the given sums guide you. Work on this on your paper.

1) \[
\begin{array}{ccc}
7 & 8 & 5 \\
2 & 3 & 4
\end{array}
\]
\[
\begin{array}{ccc}
\hline
\circ & \circ & \circ \\
\circ & \circ & \circ
\end{array}
\]
\[
\begin{array}{c}
1 & 0 & 8 & 2
\end{array}
\]

2) \[
\begin{array}{ccc}
3 & 4 & 6 \\
8 & 9 & 7
\end{array}
\]
\[
\begin{array}{ccc}
\hline
\circ & \circ & \circ \\
\circ & \circ & \circ
\end{array}
\]
\[
\begin{array}{c}
1 & 3 & 5 & 1
\end{array}
\]

3) \[
\begin{array}{ccc}
8 & 9 & 3 \\
2 & 7 & 5
\end{array}
\]
\[
\begin{array}{ccc}
\hline
\circ & \circ & \circ \\
\circ & \circ & \circ
\end{array}
\]
\[
\begin{array}{c}
1 & 2 & 0 & 4
\end{array}
\]
Answer the following questions. Write your answers on your paper.

1) What are 2 consecutive numbers greater than 20 with the sum of 51?
2) What are 3 consecutive numbers greater than 30 with the sum of 96?
Form two 3-digit numbers from the box that will give the least sum and greatest sum in which no numbers are repeated in the addends.

Number 1 is done for you. You may now start with number 2.

1)  2 3 4  
    5 6 8  

2)  1 2 3  
    6 5 4  

3)  5 4 3  
    7 6 8  

Example:

258 + 346 = 604 or 246 + 358 = 604 Least Sum
842 + 653 = 1 495 or 853 + 642 = 1 495 Greatest Sum
Lesson 20

Creating Problems involving Addition

Activity 1

Use the data on the box to complete the problems below.

<table>
<thead>
<tr>
<th>25 Philippine stamps</th>
<th>doll - PhP150.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>crayon - PhP35.00</td>
<td>25 boys</td>
</tr>
<tr>
<td>15 foreign stamps</td>
<td>98 pages</td>
</tr>
<tr>
<td>205 words</td>
<td>30 girls</td>
</tr>
</tbody>
</table>

1) Cindy read ________ of a story book in the morning and ________ in the afternoon. How many pages did she read in all?

2) Kate Anne has ________ in her collection while Kathleen has ________. How many stamps do they have in all?

3) Noemi Mae bought a doll worth ________ and a crayon worth ________. How much did she pay for the items she bought?
4) There are _______ and _______ in the library. How many pupils are in the library?

5) The grade three pupils listed _______ on the first week and _______ on the second week in their English class. How many words did they list in two weeks?

Activity 2

Study the story problems given below. Complete the problem by creating a question for what is asked. Then solve the problem.

1) A Peace Parade was held in a school. Three hundred forty-five grade 3 pupils and 412 grade 4 pupils joined the activity.
   Question: ____________________________________________?
   Solution and Answer: ____________________________________

2) Aling Nida sells vegetables in the market. On a weekend, she sold the following: 32 kilograms of potatoes, 25 kilograms of tomatoes, 28 kilograms of onions and 38 kilograms of cabbage.
   Question: ___________________________________________?
   Solution and Answer: ________________________________

3) Kim Christian has 120 caimitos. His friend Kenneth has 203 caimitos.
   Question: ____________________________________________?
   Solution and Answer: _______________________________
4) Napoleon read 123 pages of a pocketbook on Monday and 118 pages on Wednesday.
Question: __________________________________________?
Solution and Answer: _______________________________

Activity 3

Study the data given below. Create a problem using the given data. Then solve the problem.

1) Given: 27 tomato seedlings
      38 eggplant seedlings
Asked: total number of seedlings
Problem: _______________________________________________
         _______________________________________________
Solution and Answer: ___________________________________

2) Given: 236 men
      324 women
Asked: total number of men and women who participated in a parade.
Problem: _______________________________________________
         _______________________________________________
Solution and Answer: ___________________________________

3) Given: Leomar has 48 marbles
      Kim has 36 marbles
Asked: total number of marbles
Problem: _______________________________________________
         _______________________________________________
Solution and Answer: ___________________________________
Activity 4

Create a problem using the given data. Then solve the problem.

1) Given: 223 rattan chairs  
247 wooden chairs  
Asked: total number of chairs in the social hall  
Problem: _______________________________________________  
_______________________________________________________?

Solution and Answer: _________________________________

2) Given: 70 jackfruit seedlings  
110 camias seedlings  
Asked: total number of seedlings in the nursery  
Problem: _______________________________________________  
_______________________________________________________?

Solution and Answer: _________________________________

3) Given: Kenneth painted 24 flower pots  
Ben painted 18 flower pots  
Asked: total number of flower pots painted  
Problem: _______________________________________________  
_______________________________________________________?

Solution and Answer: _________________________________
Create a problem using the given data. Then solve the problem.

1) Given: 128 tickets sold by Grade 3 pupils
   119 tickets sold by Grade 4 pupils
   Asked: total number of tickets sold for the school fair
   Problem: _______________________________________________
   _______________________________________________________
   Solution and Answer: ________________________________

2) Given: 312 plastic bottles collected by Grade 3 pupils
   428 plastic bottles collected by Grade 4 pupils
   Asked: total number of plastic bottles collected for the
   recycling project of Science Club
   Problem: _______________________________________________
   _______________________________________________________
   Solution and Answer: ________________________________

3) Come up with your own problem.
   Problem: ____________________________________________
   ___________________________________________________
   ___________________________________________________
   Solution and Answer: ________________________________