Lesson Guides in Elementary Mathematics
Grade 5

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GRADE 5

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The Lesson Guides in Elementary Mathematics were developed by the Department of Education through the Bureau of Elementary Education in coordination with the Ateneo de Manila University. These resource materials have been purposely prepared to help improve the mathematics instruction in the elementary grades. These provide integration of values and life skills using different teaching strategies for an interactive teaching/learning process. Multiple intelligences techniques like games, puzzles, songs, etc. are also integrated in each lesson; hence, learning Mathematics becomes fun and enjoyable. Furthermore, Higher Order Thinking Skills (HOTS) activities are incorporated in the lessons.

The skills are consistent with the Basic Education Curriculum (BEC)/Philippine Elementary Learning Competencies (PELC). These should be used by the teachers as a guide in their day-to-day teaching plans.
## IV. MEASUREMENT

**Comprehension of Area**

1. Finds the area of other plane figures in square meters/centimeters  
   - parallelograms  
   - trapezoids  
   - circles  
2. Application of Measurement of Area  
   2.1 Solves word problems involving area of plane figures  
   2.1.1 Analyzes the word problem

3. Draws congruent and similar polygons  
   3.1 Visualizes congruence/similarity of polygons  
   3.2 Identifies congruent/similar polygons

<table>
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<th>STRATEGIES USED</th>
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<th>With HOTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patience, Industry, Helpfulness</td>
<td>Modeling, Simplifying the problem, Writing equation</td>
<td>Reading, Writing, Speaking, Cooperative groups, Diagrams</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>Willingness to do assigned task</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

v
Area of a Parallelogram

I. Learning Objectives

Cognitive: Find the area of a parallelogram in square metres and centimetres
Psychomotor: Write the area of a parallelogram
Affective: Work cooperatively in a group

II. Learning Content

Skill: Area of a parallelogram
Reference: BEC PELC IV.A.5
Value: Cooperation

III. Learning Experiences

A. Preparatory Activities

1. Mental Computation

   What is the area of a rectangular lot whose length is 12 metres and the width is 8 metres?

2. Drill

   Strategy: Agawan ng Panyo

   Materials: Flash cards, handkerchief
   Mechanics:
   a. Ask for a tall volunteer pupil to stand up front, in the center. He/she holds the
      handkerchief and lets it dangle in his/her hand.
   b. Divide the class into 2 groups. Ask the first two pupils of each team to stand at the center
      aisle at the back of the room. They are the first pair to play.
   c. The teacher flashes a mathematical sentence or asks a question about the different
      quadrilaterals. Pupils will then name the figure. Example:
      1) A figure with 4 equal sides and 4 right angles. (square)
      2) A figure with 4 equal sides but no right angles. (rhombus)
      3) Quadrilaterals with opposite pairs of sides parallel. (parallelograms)
      4) A parallelogram with 4 right angles (rectangle or square)
      5) A figure with 2 sides parallel. (trapezoid)
   d. The pupil who gets the handkerchief first gets the chance to give the answer. The team
      gets the point if the answer is correct. The pupil from the other team may 'steal' the point
      if the answer previously given by the other group is incorrect.
   e. Continue the game until most of the pupils have participated. The team with the most
      number of points wins.

3. Review

   a. Checking of assignments
   b. Complete the table.

<table>
<thead>
<tr>
<th>Length</th>
<th>Width</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 cm</td>
<td>11 cm</td>
<td></td>
</tr>
<tr>
<td>17 m</td>
<td></td>
<td>204 m²</td>
</tr>
<tr>
<td>6.5 cm</td>
<td>9 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 dm</td>
<td>230 dm²</td>
</tr>
<tr>
<td>8 m</td>
<td></td>
<td>76 m²</td>
</tr>
</tbody>
</table>
4. Motivation

What do you call a quadrilateral with 2 pairs of parallel sides?

B. Developmental Activities

1. Presentation

Strategy 1: Using a problem opener with illustration

Roy planted vegetables in his backyard to prevent soil erosion. His vegetable garden is a parallelogram. It has a base of 6 metres and a height of 4 metres. What is the area of the vegetable garden?

Altitude or height – 4 metres

Base – 6 metres

Length

A

B

Width

- Instruct the pupils to cut out along the dotted line of the illustration A shown by the teacher.
- Paste the dotted line cut out as shown in illustration B.
- Ask the pupils what figure is formed now?
- Stress to the pupils that the area of a parallelogram is the same as the area of a rectangle.
- Area of parallelogram = base x height or base x altitude
- Stress also that the base is equal to the length of the rectangle and the height is the width of the rectangle.
- Let the pupils solve the problem.
- Give more exercises in finding the area of a parallelogram.

Valuing:
What is the value that Roy showed in the problem? If you were Roy, will you do the same?

Strategy 2: Group Work – How fast we are.

Group the pupils into 4 groups. The teacher will distribute envelopes with activity cards.

Mechanics:
- Group the pupils into 4 groups.
- Distribute envelopes with activity cards.
- Read and understand the problem carefully.
  (Refer to the problem in Strategy 1)
- Draw a parallelogram based on the problem. (by pairs)
e. Name the base and the height. Emphasize that the dotted line is the height.
f. Cut the dotted line and paste it on the other side of the parallelogram.
g. Ask what quadrilateral is formed? (rectangle)
h. If the length is the base and the height becomes the width, how do you find the area of the parallelogram?
   \[ A = b \times h \]
i. Let the pupils answer the problem and report what they learned in the activity.

Valuing:

What value is shown by Roy in the problem? What value is developed when you work cooperatively?

Strategy 3: Puzzle Game

Materials: cutouts

Mechanics:
   a. The teacher distributes cutouts of parallelograms.
   b. Paste on a manila paper a whole parallelogram.
   c. Paste on a manila paper a parallelogram cutout on the dotted line.
   d. Paste on a manila paper a rectangle showing the dotted line.
   e. What have you discovered? Parallelograms are similar to rectangles.
   f. How do you find the area of a parallelogram?
   g. The pupils answer exercises on finding the area of a parallelogram.

2. Fixing Skills

Find the area of the following figures.

1) \[ \text{6 cm} \times 3 \text{ cm} \]
2) \[ \text{5 cm} \times 11 \text{ cm} \]
3) \[ \text{5 cm} \times 16 \text{ cm} \]
4) \[ \text{16 m} \times 5 \text{ m} \]
5) \[ \text{3 cm} \times 3 \text{ cm} \]
3. **Generalization**

How do you find the area of a parallelogram?
The area of a parallelogram is the product of the base and the height

\[
\text{Area} = \text{base} \cdot \text{height}
\]

\[
A = bh
\]

C. **Application**

1. Find the area of the parallelogram shown below.

![Parallelogram](image)

2. The area of a parallelogram is 84 sq m and the height is 12 m. What is the base?

3. The base of a parallelogram is 30 cm longer than its height. The height is 70 cm. What is the area of the parallelogram?

4. Draw 2 different parallelograms that each have an area of 12 square centimeters.

IV. **Evaluation**

A. Find the area of the parallelogram.

![Parallelogram](image)

B. Complete the table.

<table>
<thead>
<tr>
<th></th>
<th>Length or Base</th>
<th>Width or Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9 cm</td>
<td>15 cm</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>12 m</td>
<td></td>
<td>84 m²</td>
</tr>
<tr>
<td>3</td>
<td>13 cm</td>
<td>7.4 cm</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2.5 m</td>
<td></td>
<td>62.5 m²</td>
</tr>
<tr>
<td>5</td>
<td>30 m</td>
<td>25 m</td>
<td></td>
</tr>
</tbody>
</table>
V. Assignment

Find the area, base or height of the parallelogram.

1) \( b = 10 \text{cm} \) \( h = 6.8 \text{cm} \) \( A = \) \_

2) \( b = 13.5 \text{m} \) \( h = 16 \text{m} \) \( A = \) \_

3) \( b = \) \_

4) \( b = 11 \text{cm} \) \( h = \) \_

5) \( b = 9.5 \text{m} \) \( h = 12.3 \text{m} \) \( A = \) \_

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Area of a Trapezoid

I. Learning Objectives

Cognitive: Find the area of a trapezoid in square metres and centimetres
Psychomotor: Manipulate and measure the bases and height of a trapezoid
Affective: Show enthusiasm in any given task

II. Learning Content

Skill: Finding the area of a trapezoid
Reference: BEC PELC IV A 5
Materials: cutouts of trapezoid, chart, flash cards
Value: Show enthusiasm in any assigned task

III. Learning Experiences

A. Preparatory Activities

1. Mental Computation

   A triangular garden has a base of 10 metres and an altitude of 11 metres. What is the area of the garden?

2. Drill

   Game: Ring the Bell
   a. Put a bell on a table in front of the class.
   b. Divide the class into 2 groups. Ask the first two pupils of each team to stand on the center aisle at the back of the room. They are the first pair of players.
   c. Teacher flashes a number sentence.
      Give the value of \( N \) orally.
      \((5 + 10) \times 5 = N \)
      \((2 + 4) \times 5 \div 2 = N \)
      \((6 + 9) \div 2 = N \)
      \((4 + 3) \times 6 \div 2 = N \)
      \((2 + 4) \times 8 \div 2 = N \)
   d. The pupil who first rings the bell gives the answer. The team gets the point if the answer is correct. The pupils from the other team may ‘steal’ the point if the answer previously given by the other team is incorrect.
   e. Continue the game until most of the pupils have participated. The team with the most number of points wins.
3. **Review**

   a. Checking of assignments
   b. Fill in the blanks.

<table>
<thead>
<tr>
<th>Triangle</th>
<th>Base</th>
<th>Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 cm</td>
<td>8 cm</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>12 m</td>
<td></td>
<td>90 m²</td>
</tr>
<tr>
<td>3</td>
<td>5 cm</td>
<td>16 m</td>
<td>45 cm²</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>30 cm²</td>
</tr>
<tr>
<td>5</td>
<td>25 cm</td>
<td>18 cm</td>
<td></td>
</tr>
</tbody>
</table>

4. **Motivation**

   What do you call this figure? Is it a quadrilateral?

   ![Trapezoid Diagram](image)

   Which is the height?
   Which is the upper base?
   Which is the lower base?

B. **Developmental Activities**

1. **Presentation**

   **Strategy 1: Using a problem opener with illustration**

   Mr. Reyes has a trapezoidal field of palay, the bases of which are 8 metres and 12 metres. The height is 4 metres. Find the area of the trapezoidal field.

   ![Trapezoid Problem](image)

   a. What is asked in the problem?
      - How long is the shorter base?
      - How long is the longer base?
      - What is the height?
      - How do you find the area of a trapezoid?

   b. Elicit possible solutions.

   c. Show how to find the area of a trapezoid.

   \[
   A = \frac{1}{2} (b_1 + b_2) \times h \\
   b_1 = 8 \text{ m} \\
   b_2 = 12 \text{ m} \\
   h = 4 \text{ m}
   \]
\[ A = (8 + 12) \div 2 \times 4 = N \]
\[ (20 \div 2) \times 4 = N \]
\[ \text{Area} = 40 \text{ m}^2 \]

d. Give exercises on finding the area of a trapezoid.

Example:

![Trapezoid Diagram]

e. Give more exercises on finding the area of a trapezoid.

**Strategy 2: Group Activity**

Materials: cutouts of trapezoid, manila paper

a. Group the pupils into 4 groups.
b. Distribute envelopes with cutouts of trapezoid.
c. Let them trace it on a grid paper or graphing paper and let them find the height, the upper base and the lower base as shown below.

\[ \text{Height} = 4 \text{ units} \]
\[ \text{Base } 1 = 4 \text{ units} \]
\[ \text{Base } 2 = 8 \text{ units} \]

d. Divide the trapezoid into 2 triangles.
Find the area of the 2 triangles as

Base 1 = 4, Height = 4
\[ A = \frac{1}{2} \times \text{base} \times \text{height} \]
\[ A = \frac{1}{2} \times 4 \times 4 \]
\[ A = 8 \text{ square units} \]

Base 2 = 8, Height = 4
\[ A = \frac{1}{2} \times \text{base} \times \text{height} \]
\[ A = \frac{1}{2} \times 8 \times 4 \]
\[ A = 16 \text{ square units} \]

Total area = 8 sq. units + 16 sq. units = 24 sq. units
e. Emphasize that a trapezoid can be separated into 2 triangles. Therefore, Area of a Trapezoid:

\[ A = \frac{1}{2} (b_1 + b_2) \times h \]

\[ (4 + 8) \div 2 \times 4 = \]
\[ 12 \div 2 \times 4 = \]
\[ 6 \times 4 = 24 \text{ square units} \]

f. Let the pupils answer exercises on finding the area of the trapezoid

Examples:

![Trapezoid Diagram](image)

**Strategy 3: Practical Works – Group Work**

Materials: cutouts of trapezoid, blocks of wood with shape of trapezoid, ruler, tape measure, etc.

Mechanics:

a. The teacher groups the pupils into 4 groups.
b. Distribute cutouts and blocks of wood in the shape of a trapezoid.
c. Let them measure the 2 bases and the height of the trapezoid.
d. Give the formula in finding the area of the trapezoid.

\[ A = \frac{1}{2} (b_1 + b_2) \times h \]

e. Solve for the area of the trapezoid.

Example:

![Trapezoid Diagram](image)

\[ A = \frac{1}{2} (b_1 + b_2) \times h \]
\[ (11 + 15) \div 2 \times 6 = \]
\[ (26 \div 2) \times 6 = \]
\[ 13 \times 6 = 78 \text{ cm}^2 \]

f. Let the pupils solve for the area of the trapezoid on the board by groups.

**Valuing:**

Did you enjoy doing the activity? What value is developed when you performed the activity?
2. Fixing Skills

Find the area of the following trapezoid.

\[
\text{A} = \frac{1}{2} (b_1 + b_2) \times h.
\]

\begin{align*}
\text{a)} & \quad b_1 = 3 \text{ cm} \\
& \quad b_2 = 7 \text{ cm} \\
& \quad h = 5 \text{ cm} \\
\text{b)} & \quad b_1 = 7 \text{ cm} \\
& \quad b_2 = 6 \text{ cm} \\
& \quad h = 4 \text{ m} \\
\text{c)} & \quad b_1 = 7 \text{ cm} \\
& \quad b_2 = 6 \text{ cm} \\
& \quad h = 4 \text{ m} \\
\end{align*}

3. Generalization

What is a trapezoid?
A trapezoid has one pair of parallel sides called bases.
The formula for finding the area of a trapezoid is

\[
A = \frac{1}{2} (b_1 + b_2) \times h.
\]

C. Application

1. Which figure has a greater area, a triangle with a base of 12 m and a height of 6 m or a trapezoid with bases of 12 m and 6 m and height of 4 m?

2. A pattern of a sail for a big boat is shown. How much material in square meter is needed to make the sail?

3. Solve for the area of the given figure.
IV. Evaluation

A. Find the area of the trapezoid.

1. \(12 \text{ m} \quad 6 \text{ m} \quad 7 \text{ m} \)
2. \(7 \text{ m} \quad 7.5 \text{ m} \quad 12 \text{ m} \)
3. \(9.6 \text{ m} \quad 8 \text{ m} \quad 16.4 \text{ m} \)
4. \(11 \text{ m} \quad 6 \text{ m} \quad 16 \text{ m} \)
5. \(11.5 \text{ cm} \quad 8 \text{ cm} \quad 6.5 \text{ cm} \)

B. Complete the table.

<table>
<thead>
<tr>
<th>Trapezoid</th>
<th>Base 1</th>
<th>Base 2</th>
<th>Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8 cm</td>
<td>10 cm</td>
<td>5 cm</td>
<td>_____</td>
</tr>
<tr>
<td>2</td>
<td>2.5 m</td>
<td>4.5 m</td>
<td>3 m</td>
<td>_____</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>6</td>
<td>60 m²</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>15 cm</td>
<td>21 cm</td>
<td>126 cm²</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>9.5</td>
<td>10.5</td>
<td>7</td>
<td>_____</td>
</tr>
</tbody>
</table>

V. Assignment

Find the area of the trapezoid.

1. \(b_1 = 16 \text{ cm} \quad b_2 = 7 \text{ cm} \quad h = 10 \text{ cm} \quad A = _____ \)
2. \(b_1 = 9 \text{ m} \quad b_2 = 7 \text{ m} \quad h = 4 \text{ m} \quad A = _____ \)
3. \(b_1 = 6 \text{ m} \quad b_2 = 11 \text{ m} \quad h = 9 \text{ m} \quad A = _____ \)
4. \(b_1 = 21.5 \text{ cm} \quad b_2 = 18.5 \text{ cm} \quad h = 20 \text{ cm} \quad A = _____ \)
5. \(b_1 = 8.2 \text{ m} \quad b_2 = 12.8 \text{ m} \quad h = 10 \text{ m} \quad A = _____ \)

Area of a Circle

I. Learning Objectives

Cognitive: Find the area of a circle in square metres and centimetres
Psychomotor: Manipulate and measure the diameter and radius of the circle
Affective: Find enjoyment in doing the activity

II. Learning Content

Skill: Finding the area of a circle
Reference: BEC PELC IV.A.6
III. Learning Experiences

A. Preparatory Activities

1. Drill

   Game Ka Na Ba?
   a. The teacher reads the question with choices.
   b. The teacher will ask: Would you like to go on for ₱100 or stop?
      If he/she goes on, the price goes higher and higher until he/she gets the prize.
      Example: (Numbers to be squared should not be more than 15)
      1) What is $12^2$?
         a. 100     b. 124     c. 144     d. 120
      2) What is $15^2$?
         a. 150     b. 200     c. 250     d. 225

2. Review

   a. Checking of assignments
   b. Identify the parts of a circle.

   1) Line segment AB is called ______
   2) Line segment CD is called ______
   3) The measure of the region enclosed by the circle is called ______

3. Motivation

   Name any round object inside the classroom or any round object that you brought. Show the diameter and the radius.

B. Developmental Activities

1. Presentation

   Strategy 1: Practical Work – Group Activity

   Materials: real objects such as plate, ice cream cup cover of any size or any round object, ruler, tape measure.

   Mechanics:
   a. Instruct the pupils to bring out the materials that they brought like paper plate, ice cream cup cover or any round object.
   b. Let the pupils measure the diameter as shown below.
c. Divide the diameter by 2 to get the radius.

d. Tell the pupils that the value of $\pi$ is approximately 3.14 or $\frac{22}{7}$ and that the formula to find the area of a circle is $A = \pi r^2$.

e. Solve for the area of the circle.

\[
A = \pi \times r^2 \\
= 3.14 \times 4^2 \\
= 3.14 \times 16 \\
A = 50.24 \text{ cm}^2
\]

f. Call as many pupils in front and solve for the area of the circle.

What value is developed when you perform the activity?

**Strategy 2: Use a problem opener**

Materials: cutouts of circles

Every time it rains, Mrs. Flores saves water in a big clay jar called 'tapayan'. She covers them with a circular galvanized iron with a radius of 5 dm. What is the area of the circular cover?

a. Look at the figure of the circle.

![Circle](image)

What is the radius?

5 dm

b. Explain to the pupils that the ratio of the circumference of a circle to the diameter is the same for all circles. The circumference of any circle is about $3 \frac{1}{7}$ or 3.14 times the diameter. The ratio is represented by the Greek letter $\pi$ spelled pi and pronounced as pie.

c. Let the pupils find the area.

\[
A = \pi r^2 \\
= 3.14 \times 5 \times 5 \\
= 3.14 \times 25 \\
Area = 78.50 \text{ dm}^2
\]

d. Distribute cutouts of circle with dimensions and let the pupils find the area.

e. Call as many pupils to solve for the area of the circle on the board.

**Valuing:**

What value is developed in performing the activity?

What value is developed when you save water?
2. Fixing Skills

Find the area of the circle.

a. \[ d = 2 \text{ cm} \]

b. \[ \text{diameter} = 4 \text{ cm} \]

c. \[ \text{diameter} = 20 \text{ cm} \]

d. \[ d = 12 \text{ m} \]

\[ A = ? \]

e. \[ r = 15 \text{ km} \]

\[ A = ? \]

3. Generalization

What is the formula in finding the area of a circle?

\[ A = \pi r^2 \]

C. Application

1. Cellular telephones send messages within a circular area called a cell. Suppose a cell has a radius of about 1000 m. Find the area of the cell?

2. You are making a design for a circular button. Your design fits on a circle with a radius of 3 centimeters. How much area will be covered by your design?

3. How many times as great as the area of a 30 cm pizza is the area of a 60 cm pizza?

IV. Evaluation

Find the area of the circles.

1) \[ \text{radius} = 6 \text{ cm} \]

2) \[ \text{radius} = 11 \text{ cm} \]

3) \[ \text{radius} = 6.5 \text{ cm} \]
Solving Problems on Area of Plane Figures

I. Learning Objectives

Cognitive: Solve word problems involving area of plane figures
Psychomotor: Solve word problems accurately
Affective: Show patience in solving word problem

II. Learning Content

Skill: Solving word problem involving area of plane figures
Reference: BEC PELC IV.A.7
Materials: flash cards, chart, and drawing
Value: Industry and helpfulness

III. Learning Experiences

A. Preparatory Activities

1. Mental Computation

   I am thinking of a number. If I add 10 to it then multiply the sum by 4, the product is 60. What is my number? (Give at least 5 similar exercises.)

2. Drill/Review

   Recall the different formula for finding the area of plane figures.

   Strategy: Game Matching Pairs

   Materials: Drawing of the different polygons with given measurements, or formula or answers written on index cards.
   Mechanics:
   a. Distribute the question cards equally to the players. Place the answer cards on the table face down to form a deck of cards. Put the top card face up. The player who
has the question card that corresponds to this answer card keeps both cards and earns a point; thus, starting the game.

b. The second player draws a card from the deck of answer cards. If the card he/she draws corresponds to any of his/her question cards, he/she keeps the cards and earns a point. If the cards do not match, he/she loses both the cards.

Example:

Question Cards

| Formula for Finding the area of Trapezoid | A = \frac{1}{2}(b1+b2)h |
| Formula for Finding the Area of Parallelogram | A = b \times h |
| Area of Square Where Side S = 20 cm | A = 400 cm² |
| Area of Triangle b = 15 cm \ h = 9 cm | A = 67.5 cm² |

Give more examples.

c. The play continues until all the answer cards have been drawn. The player with the most number of cards at the end of the game is declared the winner.

B. Developmental Activities

1. Presentation

Strategy 1: Problem Opener

Ramon has a vegetable garden in their backyard. He planted it with pechay and eggplant. The garden is in the shape of a parallelogram with a base of 8 metres and a height of 6 metres. What is the area of the garden?

Who planted vegetables in their backyard?
Will the family have an abundant supply of vegetables?
What do you get from eating vegetables? Do you think Ramon’s family will be healthy? Why?

Let us analyze the problem.
What is asked in the problem?
What are the given facts?
What is the formula in finding the area of a parallelogram?
What is the number sentence for the problem?

\[
\text{Area} = b \times h = N \\
= 8 \times 6 \\
= 48 \text{ m}^2
\]

Let the pupils answer the exercises on problem solving by groups.
What should you do with your vacant lot? If you were Ramon, would you do the same? Why?

Strategy 2: Visualization of the Problem (Drawing Pictures)

Solve the problem. Draw a diagram first to aid you in computation.

a. The flower garden of Mrs. Torres is in the form of a parallelogram with an altitude of 4.5 metres. What is the area of the garden if the base is 3 metres.

b. A calamansi farm is in the shape of a trapezoid with the bases of 18 metres and 20 metres and an altitude of 10 metres. Find the area.

2. Fixing Skills

Solve the following problems.

1. Mrs. Espinosa’s bathroom is in the form of trapezoid with bases 4.5 metres and 3.5 metres and a height of 5 metres. Find the area.

2. Find the area of a bulletin board, which is parallelogram in shape with a base of 4 metres and a height of 3.2 metres.

3. Generalization

To solve the problem:
- understand the word problem
- think and analyze
- find what is asked
- use the right formula for the figure

C. Application

1. A triangle and a rectangle have the same and the same base. What can you say about their heights?

2. A rectangular flower garden has an area of 20 sq m. A sprinkler at the center of the garden covers an area that has a radius of 3 m. Will the sprinkler water the entire garden?

3. You are painting a wall that has a circular window. You have enough paint to cover 50 square centimeters. Do you need to buy more paint? Explain how you get your answer.
IV. Evaluation

Solve the problems.

1. Ariel prepaid a rectangular seedbed measuring 8 metres long and 4 metres wide. What is
   the area of the seedbed?
2. Mr. Garces had a trapezoidal field planted with mongo. If the field has bases of 12 metres
   and 15 metres and a height of 7 metres. What is the area of the field?
3. Find the area of a circular pool whose radius is 2 metres.
4. Mr. Perez has a fishpond in a shape of a parallelogram. If the base is 6 metres and the
   height is 3 metres, what is the area of the fishpond?
5. Cris wanted to cover their sala with linoleum. If their sala measures 7 m long and 5 m wide,
   how many square metres of linoleum will be used?

V. Assignment

Solve the following problems.

1. Mike’s vegetable garden is in the shape of a parallelogram with a base of 10.8 metres and a
   height of 9 metres. Find the area of the garden.
2. Find the area of a cornfield with bases 65 metres and 55.5 metres and a height of 48.5
   metres. What is the area of the field?
3. A flower garden has a base of 12 metres and a height of 6 metres. If the garden is
   parallelogram in shape, what is the area?