

Lesson 79: Finding the Circumference of a Circle

Week 9

Objective: Finds the circumference of a circle

Value Focus: Accuracy

Prerequisite Concepts and Skills:

Formula of circumference of a circle

Multiplication of decimals

Materials:

References: K to 12 Grade 5 Curriculum, M5ME-IIIi-70, Lesson Guide - Gr.5 pp. 366 - 369, Mathematics for a Better Life Textbook p. 244 - 245

Instructional Procedure

Preliminary Activities

Drill

Written (Use drill boards for maximum participation)

Write the product.

$$\begin{array}{r} 3.14 \\ \times 4 \\ \hline N \end{array}$$

$$\begin{array}{r} 3.14 \\ \times 8 \\ \hline N \end{array}$$

$$\begin{array}{r} 3.14 \\ \times 6 \\ \hline N \end{array}$$

$$\begin{array}{r} 3.14 \\ \times 23 \\ \hline N \end{array}$$

$$\begin{array}{r} 3.14 \\ \times 10 \\ \hline N \end{array}$$

Review

Fill in the blanks with the correct answer.

Choose the number of the correct answers below and place it on the blanks.

The distance around a circle is _____.

A line that passes through the center of a circle is _____.

An estimate of the value pi (π) is _____.

One half of the diameter of a circle is _____.

radius

diameter

circumference

4) area

5) 3.14

6) 2.56

B. Developmental Activities

Presentation

Present a situation to the class.

Mrs. Nicolas planted dwarf santan around her circular flower garden which has a diameter of 8 metres. How many metres did she plant with dwarf santan?

Ask:

What did Mrs. Nicolas planted in her garden?

What is the shape of the garden of Mrs. Nicolas?

How will you solve the problem?

Performing the Activities

Group the pupils in 5 working teams. Ask the teams to work together in looking for the solution to the problem.

Expected answers

Solution 1:

To find the circumference, multiply the diameter by 3.14

$$d = 8 \text{ m}$$

$$C = \pi \times d$$

$$= 3.14 \times 8 \text{ m}$$

$$= 25.12 \text{ m planted with dwarf santan}$$

Solution 2:

If radius is given use this formula, $C = 2\pi r$

Given: 4 metres radius

$$C = (2 \times 3.14) 4$$

$$= 6.28 \times 4$$

$$= 25.12 \text{ m}$$

3. Processing the Activities

How did you find the activity?

How were you able to find the answer to the problem?

Discuss with the pupils the formula in getting the circumference of a circle.

Reinforcing the Concept and Skill

Discuss the presentation under **Explore and Discover** on page _____ of LM Math Grade 5. Then, give the following activities:

Ask the pupils to answer the activity under the **Get Moving** on page _____, LM Math Grade 5.

Ask them also to answer the activity under **Keep Moving** on page _____, LM Math Grade 5.

Summarizing the Lesson

Lead the pupils to give the following generalization by asking: "What is the formula in finding the circumference of a circle?"

To find the circumference of the circle, use the formula:

$$C = 2\pi r \quad \text{or}$$

$$C = \pi d$$

Applying to New and Other Situations

Ask the learners to solve the items under **Apply Your Skills** on _____, LM Math Grade 5.

C. Assessment

Find the circumference of the circle with the following radius or diameter.

1) $r = 11 \text{ m}$

$C =$

4) $r = 9.5 \text{ m}$

$C =$

2) $d = 2 \text{ cm}$

$C =$

5) $d = 16 \text{ cm}$

$C =$

3) $d = 20 \text{ m}$

$C =$

D. Home Activity

Remediation

Complete the table below:

Circle	Radius	Diameter	Circumference
A	24 cm		
B		40 m	
C		35 cm	
D	34.5 m		