Session 22: Decimal- addition & subtraction

Session Title	Decimal- addition & subtraction
Objective	1. Students will be able to: 2. Align and compute decimal numbers in addition and sub 3. Apply these operations in real-world contexts.
Topics	1. Place value of decimal numbers 2. Decimal addition 3. Decimal subtraction 4. Aligning decimals in operations
Materials required	1. Whiteboard and markers 2. Decimal place value chart 3. Printed worksheets 4. Flashcards for puzzle match activity
Methodology	Guided practice with real-life problem solving
Session Duration	90 minutes

Introduction Activity (30 minutes):

Decimal Price Tag Game(15 minutes)

Purpose: Activate prior knowledge and build context.

Setup:

Bring 5–6 small classroom items (e.g., pencil, eraser, notebook).

Label each with a price tag (e.g., $0.75, $1.20, $2.50, etc.).

Instructions:

1. Give each student or group a “shopping budget” (e.g., $5.00).
2. Ask them to “buy” 2–3 items and calculate the total cost and change from $5.00.
3. Discuss answers and write sample calculations on the board.

Transition:

"To shop smart, you need to be able to add and subtract decimal prices correctly. Today, we’ll learn how to do that like pros!”

2. Concept Teaching (15 minutes)

A. Place Value Review:

- Draw a place value chart on the board (Ones, Tenths, Hundredths, Thousandths).
- Ask students to place digits in the correct columns for 3.75, 0.08, etc.

B. Key Concept:

- Always line up decimal points when adding/subtracting.
- Add placeholders (zeros) if needed for consistency.

Demonstration:

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  4.2
+ 1.35
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  5.55
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Explain the importance of matching decimal places.

Repeat with subtraction:

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  5.00
- 2.45
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2.55

Main Activity (40 minutes):

(20 minutes)

Addition

- 1.3.25 + 4.75 - Answer: 8.00
- 5.6 + 2.85 - Answer: 8.45
- 7.4 + 3.19 - Answer: 10.59
- 0.78 + 6.22 - Answer: 7.00
- 9.03 + 1.97 - Answer: 11.00

Subtraction

- 6.75 – 3.25 - Answer: 3.50
- 9.8 – 4.56 - Answer: 5.24
- 7.6 – 2.39 - Answer: 5.21
- 8.25 – 5.18 - Answer: 3.07
- 10.4 – 6.73 - Answer: 3.67

Word problems (20 minutes)

Addition

1. Shopping Problem

Emily bought a book for $12.75 and a pencil case for $3.50. How much did she spend in total?

Answer: 12.75 + 3.50 = 16.25

2. Distance Travelled

Sarah walked 3.6 miles to the park and then 2.8 miles to her friend's house. How many miles did Sarah walk in total?

Answer: 3.6 + 2.8 = 6.4 miles

3. Total Time Spent

John worked for 4.5 hours on Monday and 6.25 hours on Tuesday. How many hours did he work in

total?

Answer: 4.5 + 6.25 = 10.75 hours

Subtraction

1. Money Spent

Mary had ₹20. She bought a book for ₹7.50. How much money does she have left?

Answer: 20.00 – 7.50 = 12.50

2. Time Left

The movie started at 7:00 PM and ended at 9:15 PM. How long was the movie?

Answer: 9.15 – 7.00 = 2.15 hours (or 2 hours and 9 minutes)

3. Distance Remaining

Kevin ran 5.3 miles in the morning and 2.8 miles in the afternoon. How many miles does he have left to run if his goal is 10 miles?Answer: 10.00 – (5.3 + 2.8) = 2.9 miles left

Review Questions (10 minutes):

1. Why is it important to align decimal points before adding or subtracting decimal numbers?
2. How does place value help you when working with decimal numbers in addition and subtraction?

Follow up tasks (10 minutes):

Class Work

Problems (cut out the following into individual cards):

- 3.25 + 1.75
- 6.4 – 2.15
- 5.85 + 4.15
- 9.1 – 3.6
- 7.35 + 2.65

Answers (cut and mix these up too):

- 5.00
- 4.25
- 6.15
- 9.00
- 7.7

Instructions:

- Mix all problem and answer cards.
- Each team must match the correct answer to each problem.
- First team to complete the correct matches wins!

Expected Learning Outcome:

Knowledge Building:

By the end of the lesson, students will be able to:

- Add and subtract decimal numbers accurately.
- Align decimals correctly.
- Solve real-life word problems involving decimals

Skills Building:

- Problem-solving and self-checking

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