Activity 32 Assessment
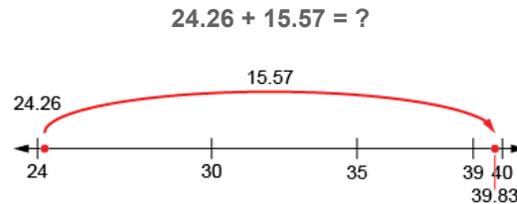## Operations with Fractions and Decimals Consolidation

Conceptual Meaning of Addition and Subtraction of Decimals

Recognizes addition and subtraction situations and models concretely to add or subtract to hundredths

$$24.26 + 15.57 = 39.83$$

Models and symbolizes ways to solve problems using an open number line.

$$24.26 + 15.57 = ?$$

Uses an understanding of place value to add or subtract decimals with hundredths (decomposes both numbers).

$$24.26 + 15.57 = ?$$

$$24 + 15 = 39 \text{ (whole numbers)}$$
$$0.26 + 0.57 = 0.83 \text{ (decimals)}$$
$$39 + 0.83 = 39.83$$

"I decomposed both numbers, added the whole numbers, then added the hundredths."

Observations/Documentation

Mathology 5
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Activity 32 Assessment
Operations with Fractions and Decimals Consolidation

Conceptual Meaning of Addition and Subtraction of Decimals (con't)

Uses an understanding of place value to decompose one number.	Uses estimation and mental math strategies to check reasonableness of solutions.	Solves addition and subtraction problems flexibly, using a variety of strategies.
24.26 + 15.57 = ? $15.57 = 15 + 0.57$ $24.26 + 15 = 39.26$ $39.26 + 0.57 = 39.83$ "I used place value to add on the second number."	**4.497 + 7.299 + 3.512 =?** "I used compatible numbers to estimate. 4.497 is close to 5, 7.299 is close to 7, and 3.512 is close to 3; 7 + 3 + 5 = 15. I calculated 15.308, so my answer is reasonable."	$36.462 - 25.108 = ?$ $36.462 - 25 = 11.462$ $11.462 - 0.108 = 11.354$

Tens	Ones	Tenths	Hundredths	Thousandths
3	6.	4	⁵6̶	¹2
2	5.	1	0	8
1	1.	3	5	4

Observations/Documentation

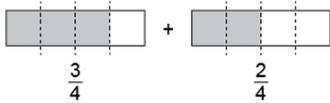|		

Activity 32 Assessment
Operations with Fractions and Decimals Consolidation
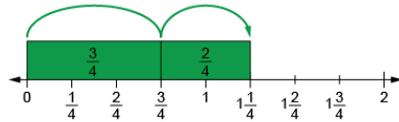
Adding and Subtracting Fractions with Like Denominators

Concretely solves problems.	Models pictorially to solve problems.	Models symbolically to solve problems.	Fluently and flexibly solves addition and subtraction problems.
$\frac{3}{4} + \frac{2}{4} = ?$ $+$ $\frac{3}{4}$ $\frac{2}{4}$ "Because each whole is divided into fourths, I can add the parts. 3 fourths + 2 fourths = 5 fourths. 5 fourths make 1 whole and $\frac{1}{4}$."	$\frac{3}{4} + \frac{2}{4} = \frac{5}{4} = 1\frac{1}{4}$ "I modelled on the number line, then counted on from $\frac{3}{4}$: 4 fourths, 5 fourths."	$3\frac{1}{8} - \frac{6}{8} = ?$ $3\frac{1}{8} = \frac{25}{8}$ $\frac{25}{8} - \frac{6}{8} = \frac{19}{8}$, or $2\frac{3}{8}$ "I converted $3\frac{1}{8}$ to $\frac{25}{8}$, then subtracted. I checked my answer using addition."	$1\frac{3}{10} + \frac{8}{10} + ? = 2\frac{7}{10}$ $1\frac{3}{10} + \frac{8}{10} = 1\frac{11}{10} = 2\frac{1}{10}$ $2\frac{7}{10} - 2\frac{1}{10} = \frac{6}{10}$ $2\frac{1}{10} + \frac{6}{10} = 2\frac{7}{10}$ "$\frac{6}{10}$ needs to be added to the other fractions to equal $2\frac{7}{10}$."

Observations/Documentation