

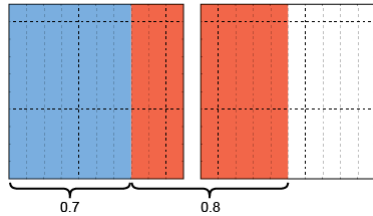
Activity 38 Assessment

Using Mental Math to Add and Subtract Decimals

Conceptual Meaning of Addition and Subtraction of Decimals

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

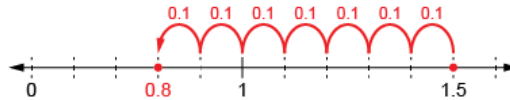
$$0.7 + 0.8 = 1.5$$



"7 tenths + 8 more tenths = 1 whole and 5 tenths"

Models and symbolizes ways to solve problems by using a number line

$$1.5 - 0.7 = ?$$



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

$$14.6 + 27.8 = ?$$

$$14 + 27 = 41 \text{ (whole numbers)}$$

$$0.6 + 0.8 = 1.4 \text{ (decimals)}$$

$$41 + 1.4 = 42.4$$

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

Observations/Documentation

Activity 38 Assessment

Using Mental Math to Add and Subtract Decimals

Conceptual Meaning of Addition and Subtraction of Decimals (cont'd)

Uses an understanding of place value to decompose one number

$$14.6 + 27.8 = ?$$

$$27.8 = 27 + 0.8$$

$$14.6 + 27 = 41.6$$

$$41.6 + 0.8 = 42.4$$

"I used place value to add on the second number."

Uses estimation and mental math strategies to check reasonableness of solutions

$$25.86 - 17.23 = 8.63$$

$$26 - 17 = 9$$

"8.63 is the answer I calculated, and it is close to 9, so my answer is reasonable."

Solves addition and subtraction problems flexibly, using a variety of strategies

$$25.85 - 17.21 = ?$$

$$25.85 + 0.15 = 26$$

$$17.21 + 0.15 = 17.36$$

$$26 - 17.36 = 8.64$$

$$\begin{array}{r} 11 \\ 25.85 \\ - 17.21 \\ \hline 8.64 \end{array}$$

Observations/Documentation