

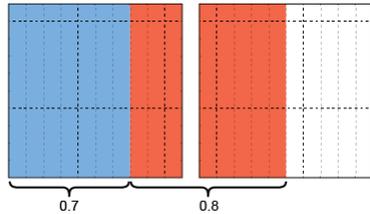
# Activity 38 Assessment

## 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

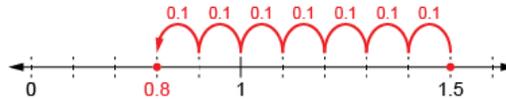
$$0.7 + 0.8 = 1.5$$



"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

$$\begin{aligned} 14.6 + 27.8 &= ? \\ 27.8 &= 27 + 0.8 \\ 14.6 + 27 &= 41.6 \\ 41.6 + 0.8 &= 42.4 \end{aligned}$$

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

Uses estimation and mental math strategies to check reasonableness of solutions

$$\begin{aligned} 25.86 - 17.23 &= 8.63 \\ 26 - 17 &= 9 \end{aligned}$$

"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

$$\begin{aligned} 25.85 - 17.21 &= ? \\ 25.85 + 0.15 &= 26 \\ 17.21 + 0.15 &= 17.36 \\ 26 - 17.36 &= 8.64 \end{aligned}$$

$$\begin{array}{r} \overset{11}{2}5.85 \\ - 17.21 \\ \hline 8.64 \end{array}$$

### Observations/Documentation