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Module 5 Decimal Operations, Exponents, and Powers

## Challenge Problems

Lesson 3 Adding and Subtracting Decimals

## Set 1

(1)

Explain how to add 5.4 and 3.25 using a model.
(2)

Explain how to subtract $4.2-0.25$ using a model.
(3) Clara subtracted 3.27 from 5.4. The difference was 2.27. Find and explain Clara's error.
5.4
$-3.27$
2.27
(4)

Solve.
$412.43-1.05+43.1$

## Possible Answers

Set 1

1. Model 5.4 with five wholes and four tenths of a whole. Then, add three more wholes, two more tenths, and five more hundredths. The total is eight wholes, six tenths, and five hundredths, or 8.65.
2. Model 4.2 using four wholes and two tenths of a whole. To show subtracting 0.25 , take away or cross out two tenths and five hundredths. That leaves three wholes and 95 hundredths, or 3.95 .
3. Clara's first mistake was not using a zero as a placeholder in the top number. She should have written 5.40. Then, when she subtracted in the hundredths place, she subtracted seven minus zero instead of zero minus seven. She subtracted from bottom to top by mistake. The correct answer is $\mathbf{2 . 1 3}$.
4. 

$$
\begin{array}{r}
412.4^{313} \not 刀^{13} \\
-1.05 \\
\hline 411.38 \\
+43.10 \\
\hline 454.48
\end{array}
$$

