

G4-M6-Lesson 13

Lesson Notes

In Grade 4, students add decimals by first writing the addends in fraction form and then adding the fractions to find the total. This strengthens student understanding of the fraction and decimal relationship, increases their ability to think flexibly, and prepares them for greater success with fractions and decimals in Grade 5.

1. Solve. Convert tenths to hundredths before finding the sum. Rewrite the complete number sentence in decimal form.

a. $2\frac{31}{100} + \frac{4}{10}$

$$2\frac{31}{100} + \frac{4}{10} = 2\frac{31}{100} + \frac{40}{100} = 2\frac{71}{100}$$

I convert 4 tenths to 40 hundredths.
I add like units.

$$2.31 + 0.40 = 2.71$$

Decimal form is another way to express the numbers.

b. $4\frac{42}{100} + 2\frac{7}{10}$

$$4\frac{42}{100} + 2\frac{7}{10} = 4\frac{42}{100} + 2\frac{70}{100} = 6\frac{112}{100} = 7\frac{12}{100}$$

I add ones to ones and hundredths to hundredths.

$$4.42 + 2.70 = 7.12$$

$$\begin{array}{r} \\ \\ 1 \frac{12}{100} \end{array}$$

I use a number bond to show
 $\frac{112}{100} = 1 + \frac{12}{100}$ since $\frac{100}{100} = 1$.

2. Solve by rewriting the expression in fraction form. After solving, rewrite the complete number sentence in decimal form.

$$4.4 + 1.74$$

$$4\frac{4}{10} + 1\frac{74}{100} = 4\frac{40}{100} + 1\frac{74}{100} = 5\frac{114}{100} = 6\frac{14}{100}$$

To add decimal numbers, I solve by relating this problem to adding fractions.

$$4.4 + 1.74 = 6.14$$

$$\begin{array}{r} \\ \\ 1 \frac{14}{100} \end{array}$$