G4-M6-Lesson 15

Lesson Notes

In Grade 4, students find the sum of money amounts by expressing the amounts in unit form, adding like units (i.e., dollars + dollars and cents + cents), and then writing the answer in decimal form with a dollar sign. Writing money amounts in unit form and fraction form builds a strong conceptual foundation for decimal notation. Students are introduced to adding decimal numbers in Grade 5.

1. 4 pennies = \$ 0 . 04 $\quad 4¢ = \frac{4}{100}$ dollar

2. 8 dimes = \$ 0 . 80 $\quad 80¢ = \frac{8}{10}$ dollar

3. 2 quarters = \$ 0 . 50 $\quad 50¢ = \frac{50}{100}$ dollar

1 penny $= \frac{1}{100}$ dollar
1 dime $= \frac{1}{10}$ dollar
1 quarter $= \frac{25}{100}$ dollar

Solve. Give the total amount of money in fraction and decimal form.

4. 7 dimes and 23 pennies

$(7 \times 10¢) + (23 \times 1¢) = 70¢ + 23¢ = 93¢$

$93¢ = \frac{93}{100}$ *dollar*

$\frac{93}{100}$ *dollar* $= \$0.93$

93 cents is 93 hundredths of a dollar. Thinking of that value as a fraction helps me to write it as a decimal number.

5. 1 quarter 3 dimes and 6 pennies

$(1 \times 25¢) + (3 \times 10¢) + (6 \times 1¢) = 25¢ + 30¢ + 6¢ = 61¢$

$61¢ = \frac{61}{100}$ *dollar*

$\frac{61}{100}$ *dollar* $= \$0.61$

6. 173 cents is what fraction of a dollar?

$\frac{173}{100}$ *dollars*

I know that 1 cent $= \frac{1}{100}$ dollar.

Solve. Express the answer in decimal form.

7. 2 dollars 3 dimes 24 pennies + 3 dollars 1 quarter

2 *dollars* 54 *cents* $+ 3$ *dollars* 25 *cents* $= 5$ *dollars* 79 *cents*

5 *dollars* 79 *cents* $= 5\frac{79}{100}$ *dollars* $= \$5.79$

I rewrite each addend as dollars and cents. I add like units and then express the amount in decimal form.

8. 7 dollars 5 dimes 2 pennies + 1 dollar 3 quarters

7 *dollars* 52 *cents* $+ 1$ *dollar* 75 *cents* $= 8$ *dollars* 127 *cents* $= 9$ *dollars* 27 *cents*

1 *dollar* 27 *cents*

9 *dollars* 27 *cents* $= 9\frac{27}{100}$ *dollars* $= \$9.27$