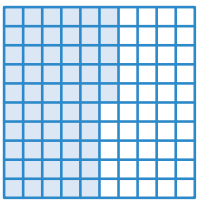
In this sub-unit . . .

- We related fractions with denominators of 10 and 100 to **decimals** in **tenths** and **hundredths** using objects and models.

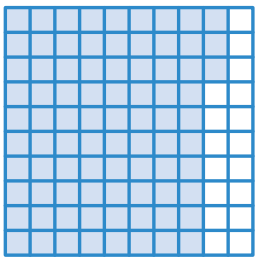


$\frac{55}{100}$ 0.55

Math tip: Any fraction with a denominator of 10 can be rewritten as a decimal in tenths. Any fraction with a denominator of 100 can be rewritten as a decimal in hundredths.

- We represented decimal numbers in word form, expanded form, and expanded notation.

0.83



eighty-three hundredths 0.8 + 0.03 (8 × 0.1) + (3 × 0.01)

- We used base-ten blocks and number lines to compare and order a set of decimal numbers.

The order from least to greatest is 0.1, 0.23, 0.32.

In this sub-unit . . .

- We represented numbers up to 1,000,000,000 in expanded form and expanded notation.

Billions	Hundreds millions	Ten millions	Millions	Hundreds thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
	4	2	0	7	6	4	1	2	9

400,000,000 + 20,000,000 + 700,000 + 60,000 + 4,000 + 100 + 20 + 9

(4 × 100,000,000) + (2 × 10,000,000) + (7 × 100,000) + (6 × 10,000) + (4 × 1,000) + (1 × 100) + (2 × 10) + (9 × 1)

Math tip: A place value chart helps you represent numbers in different ways.

- We described the relationship between digits using place value understanding.

35,687

(3 × 10,000) + (5 × 1,000) + (6 × 100) + (8 × 10) + (7 × 1)

41,509

(4 × 10,000) + (1 × 1,000) + (5 × 100) + (9 × 1)

The value of the 5 in 35,687 is 5,000.
The value of the 5 in 41,509 is 500.

5,000 is 10 times the value of 500.
500 is $\frac{1}{10}$ the value of 5,000.

- We used what we know about place value relationships to round numbers up to the hundred thousands place.

746,187 rounded to the nearest hundred thousand is 700,000.

In this sub-unit . . .

- We rounded numbers to estimate the sum and to determine if the answer is reasonable.

$$2{,}498 + 320 = 5798$$

My answer is not reasonable because 2,500 + 300 = 2,800.

- We used the expanded form algorithm to add and subtract multi-digit whole numbers.

$$\begin{array}{r} \overset{3{,}000\quad 1{,}400}{} \\ 90{,}000 + \cancel{4{,}000} + \cancel{400} + 20 + 3 \\ -\ 80{,}000 + 3{,}000 + 700 + 10 + 2 \\ \hline 10{,}000 + 0{,}000 + 700 + 10 + 1 = 10{,}711 \end{array}$$

Math tip: Regrouping means you take 1 unit from a greater place value to make 10 units of the next smaller place value.

- We used the standard algorithm with and without regrouping to add and subtract whole multi-digit numbers.

$$\begin{array}{r} \overset{1\ 1}{} \\ 765{,}431 \\ +\ 765{,}413 \\ \hline 1{,}530{,}844 \end{array}$$

In this sub-unit . . .

- We used visual models and money to represent and solve addition and subtraction involving decimals.

$$1.5 + 0.75 = 2.25$$

- We estimated sums and differences.

$$211.5 + 4.75$$

The sum is about 217 because 212 + 5 = 217.

- We solved addition and subtraction of decimals to the hundredths using the standard algorithm.

$$\begin{array}{r} {\scriptstyle 4\,10} \\ 9.\cancel{5}\cancel{0} \\ -\ 2.42 \\ \hline 7.08 \end{array}$$

Math tip: Line up the decimal numbers by place value to add or subtract.