Unit 4 Lesson 16: Round Numbers

WU Number Talk: Missing Numbers (Warm up)

Student Task Statement

Find the value that makes each equation true mentally.

- $421 + \underline{\hspace{2cm}} = 500$
- $421 + \underline{\hspace{2cm}} = 1,000$
- $6,421 + \underline{\hspace{2cm}} = 7,000$
- $6,421 + \underline{\hspace{2cm}} = 10,000$
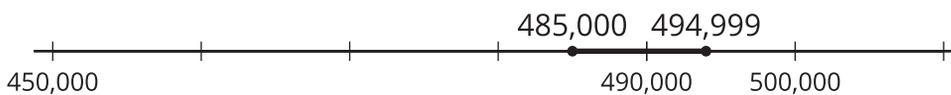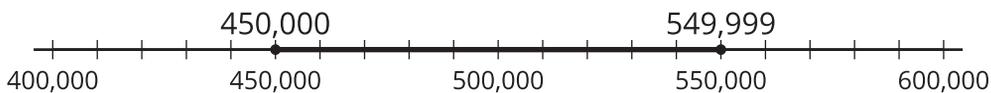
1 Round to What?

Student Task Statement

Noah says that 489,231 can be rounded to 500,000.

Priya says that it can be rounded to 490,000.

1. Explain or show why both Noah and Priya are correct. Use a number line if it helps.
2. Describe all the numbers that round to 500,000 when rounded to the nearest hundred-thousand.
3. Describe all the numbers that round to 490,000 when rounded to the nearest ten-thousand.
4. Name two other numbers that can also be rounded to both 500,000 and 490,000.

Activity Synthesis

2 Some Numbers to Round

Student Task Statement

Your teacher will show you six numbers. Choose at least three numbers and round each to the nearest 100,000, 10,000, 1,000, and 100.

Record your work in the table. Use a number line if it is helpful.

round to the nearest . . .	100,000	10,000	1,000	100
53,487				
4,896				
370,130				
96,500				
985,411				
7,150				

3 Rounded Populations (Optional)

Images for Launch

city	population	rounded to the nearest 1,000,000	rounded to the nearest 100,000	rounded to the nearest 10,000
Oakland, CA	429,082	0	400,000	430,000
Mesa, AZ	508,958	1,000,000	500,000	510,000

Student Task Statement

The table shows the estimated populations of two cities in the United States, based on surveys in 2018.

city	population	rounded to the nearest 1,000,000	rounded to the nearest 100,000	rounded to the nearest 10,000
Austin, TX	964,254			960,000
Lincoln, NE	287,401			
		1,000,000		900,000
		1,000,000	900,000	
		0	500,000	

Here are three other cities and their estimated populations:

- Charlotte, NC: 872,498
- Jacksonville, FL: 903,889
- Virginia Beach, VA: 450,189

1. Match each of the three cities with the rounded populations in the table.
2. The table shows three ways of rounding large numbers.

   a. To get a rough idea of how many people are in these cities, which ways of rounding seem appropriate?
   b. To compare the populations or put them in order by size, which ways of rounding are more helpful? Less helpful?