## Lesson 15: The Nearest Multiples of 1,000, 10,000, and 100,000

- Let's find multiples of 1 thousand, 10 thousand, and 100 thousand that are the nearest to a number.


## Warm-up: Estimation Exploration: What Could It Be?

What number could this point represent?


Record an estimate that is:

| too low | about right | too high |
| :---: | :---: | :---: |

## 15.1: Closer to This or That?

1. Answer each question. Use the number lines if they are helpful.
a. Is 16 closer to 10 or to 20 ?

b. Is 816 closer to 800 or to 900 ?

c. Is 3,816 closer to 3,000 or 4,000?

d. Is 73,816 closer to 70,000 or 80,000?

e. Is 573,816 closer to 500,000 or 600,000?

2. For 816:

- The nearest multiple of 1,000 is 1,000 .
- The nearest multiple of 100 is 800 .
- The nearest multiple of 10 is 820 .

Complete the table with the nearest multiple of 10, 100, 1,000, 10,000, and 100,000 for each number.

| nearest <br> multiple <br> of ... | 10 | 100 | 1,000 | 10,000 | 100,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 |  | -- | -- | -- | -- |
| 816 | 820 | 800 | 1,000 | -- | -- |
| 3,816 |  |  |  | - | -- |
| 73,816 |  |  |  |  |  |
| 5073,816 |  |  |  |  |  |

## 15.2: Closer to Which Number?

1. Answer each question. Label and use the number lines if they are helpful.
a. Is 425,193 closer to 400,000 or 500,000 ?

b. Is 425,193 closer to 420,000 or 430,000?

c. Is 425,193 closer to 425,000 or 426,000?

d. Is 425,193 closer to 425,100 or to 425,200 ?

e. Is 425,193 closer to 425,190 or to 425,200 ?

2. For the number 425,193 :

- The nearest multiple of 100,000 is $\qquad$ .
- The nearest multiple of 10,000 is $\qquad$ .
- The nearest multiple of 1,000 is $\qquad$ .
- The nearest multiple of 100 is $\qquad$ .
- The nearest multiple of 10 is $\qquad$ .


## 15.3: What's the Nearest Multiple?

1. For the number 136,850, Han can name the nearest multiple of $100,000,10,000$, and 1,000.

He is stuck when trying to name the nearest multiple of 100.


| nearest multiple of ... | 100,000 | 10,000 | 1,000 |
| :---: | :---: | :---: | :---: |
| 136,850 |  |  |  |

a. In the table, write the nearest multiples that Han knows for each place value. Use number lines if they are helpful.
b. Why might it be tricky to name the nearest multiple of 100 for 136,850 ? What do you think it is?
2. Name the nearest multiples of $100,000,10,000,1,000$, and 100 for each number.

| nearest multiple of <br> $\ldots$ | 100,000 | 10,000 | 1,000 | 100 |
| :---: | :---: | :---: | :---: | :---: |
| 191,530 |  |  |  |  |
| 70,500 |  |  |  |  |

