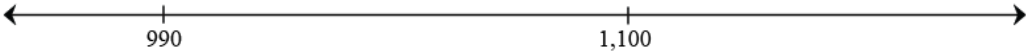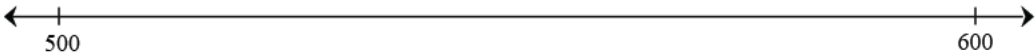| **2(2) Number and operations.** The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. | **2(2)(E)** The student is expected to locate the position of a given whole number on an open number line. |
|---|---|

**Materials**
- Pencil

**Procedure:**
Prompt the student to place the given number on the open number line.

1. **Place the number 387 on the open number line. Explain your thinking.**



    264           400

2. **Place the number 998 on the open number line. Explain your thinking.**



    990          1,100

3. **Place the number 525 on the open number line. Explain your thinking.**



    500          600

*Repeat this task with other numbers as needed.*

| **Check Student's Responses:** | **Check Student's Strategies:** |
|---|---|
| 1. □ Correct   □ Incorrect | 1. □ Used relative position and magnitude<br>□ Used place value relationships<br>□ Other: |
| 2. □ Correct   □ Incorrect | 2. □ Used relative position and magnitude<br>□ Used place value relationships<br>□ Other: |
| 3. □ Correct   □ Incorrect | 3. □ Used relative position and magnitude<br>□ Used place value relationships<br>□ Other: |

**Notes:**

| **2(2)(E)** The student is expected to locate the position of a given whole number on an open number line. | **Possible interpretations, issues to follow up on, and implications for teaching** |
|---|---|

**What did you observe?**

- The student **correctly located the relative position of the numbers.** This student should be able to explain how he or she used the relative position and magnitude of whole numbers or used place value to locate the positon of the numbers.

- The student **incorrectly located the position of the numbers.** Consider where and how the student placed the numbers on the open number line:
  - Did the student place the given number in the middle of the two marked numbers?
  - Did the student demonstrate incorrect use of the relationship between numbers such as incorrectly determining the closest number?

  *A teaching strategy might include asking the student to identify benchmark numbers on the open number line before placing the number on the open number line. For example, identifying the middle of two numbers, identifying intervals of ten, fifty, etc. Be careful not to over use interval marks. The purpose of this student expectation is to encourage the student to use an understanding of magnitude and/or the relationship among numbers to locate positions on an open number line.*



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←────┼──────────────────┼──────────────────┼────→
    500                550                600
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