Which End Is Nearer?

Sort points on a number line from 0 to 100.

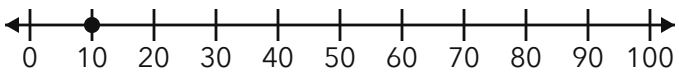
2.N.1 "Compare and represent whole numbers up to 1,000 with an emphasis on place value and equality. Read, write, discuss, and represent whole numbers up to 1,000. Representations should include, but are not limited to, numerals, words, pictures..."

NAME _____ DATE _____

CLOSER TO 0

A dot before 50 is closer to 0 than to 100.

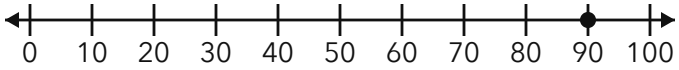
Figure A



CLOSER TO 100

A dot after 50 is closer to 100 than to 0.

Figure B



1 SORT

8 items

For Part 1, circle which end each dot is closer to; for Part 2, pick one figure from each group and explain how you knew.

1.

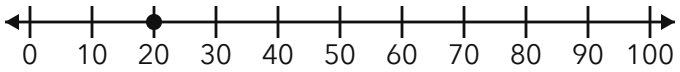


Figure 1

ZERO HUNDRED

2.

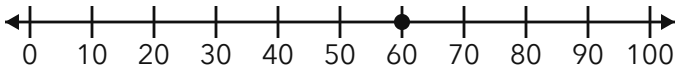


Figure 2

ZERO HUNDRED

3.

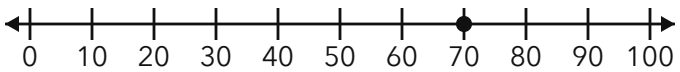


Figure 3

ZERO HUNDRED

4.

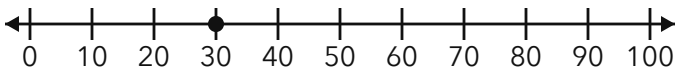


Figure 4

ZERO HUNDRED

5.



Figure 5

ZERO **HUNDRED**

6.



Figure 6

ZERO **HUNDRED**

7.



Figure 7

ZERO **HUNDRED**

8.



Figure 8

ZERO **HUNDRED**

2 PROVE IT

Explain your thinking

Pick one figure from each group and explain how you knew.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new number that is closer to 0 and one new number that is closer to 100. Do not use a number from the figures.

ZERO _____

HUNDRED _____

CHALLENGE

Write two numbers that are only 2 apart, with one closer to 0 and the other closer to 100. Explain your choices.

ANSWER KEY

Which End Is Nearer?

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (numberline)	**ZERO**	20 is before 50, so it is closer to 0.
2	Figure 2 (numberline)	**HUNDRED**	60 is after 50, so it is closer to 100.
3	Figure 3 (numberline)	**HUNDRED**	70 is after 50, so it is closer to 100.
4	Figure 4 (numberline)	**ZERO**	30 is before 50, so it is closer to 0.
5	Figure 5 (numberline)	**ZERO**	40 is before 50, so it is closer to 0.
6	Figure 6 (numberline)	**HUNDRED**	80 is after 50, so it is closer to 100.
7	Figure 7 (numberline)	**ZERO**	The dot is at 0, so it is closer to 0.
8	Figure 8 (numberline)	**ZERO**	5 is before 50, so it is closer to 0.

PART 2 · PROVE IT

Task: Pick one figure from each group and explain how you knew.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **ZERO**: 25
- **HUNDRED**: 75

Challenge: 49 is closer to 0, and 51 is closer to 100. They are 2 apart.

For Part 2, accept any two figures from different groups when the student correctly explains each dot's position relative to 50. Figure 8's dot is halfway between the 0 and 10 marks.