

Distance or Order?

Sort statements about distance from zero and number order.

6.NR.3.6 "Distinguish comparisons of absolute value from statements about order."

NAME _____

DATE _____

ABSOLUTE VALUE COMPARISON

This statement compares distances from zero. It uses absolute value bars, like $| |$.

$$|-20| > |13|$$

ORDER STATEMENT

This statement tells which number is greater or less on the number line. It compares the numbers themselves.

$$-20 < 13$$

1 SORT _____ 8 items

For each statement, circle its category, then choose two statements and explain how you knew each category.

1. $|-6| < |11|$

ABSOLUTE

ORDER

2. $|4| = |-4|$

ABSOLUTE

ORDER

3. $-6 < 11$

ABSOLUTE

ORDER

4. $|-15| > |7|$

ABSOLUTE

ORDER

5. $4 > -4$

ABSOLUTE

ORDER

6. $-15 < 7$

ABSOLUTE

ORDER

7. $|-3| < |10|$

ABSOLUTE

ORDER

8. $|-12| = |12|$

ABSOLUTE

ORDER

2 PROVE IT Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ HOW I KNEW _____

ITEM # _____ HOW I KNEW _____

3 MAKE YOUR OWN One of each

Write one new ABSOLUTE statement and one new ORDER statement.

ABSOLUTE _____

ORDER _____

CHALLENGE

Use -9 and 4 to write two true statements, one ABSOLUTE statement and one ORDER statement.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	$ -6 < 11 $	ABSOLUTE	It compares the absolute values, or distances from zero, of -6 and 11.
2	$ 4 = -4 $	ABSOLUTE	It compares two absolute values, and both distances from zero are 4.
3	$-6 < 11$	ORDER	It compares the positions of -6 and 11 on the number line.
4	$ -15 > 7 $	ABSOLUTE	It compares the absolute values, or distances from zero, of -15 and 7.
5	$4 > -4$	ORDER	It compares 4 and -4 as numbers on the number line.
6	$-15 < 7$	ORDER	It compares -15 and 7 as numbers on the number line.
7	$ -3 < 10 $	ABSOLUTE	It compares the absolute values, or distances from zero, of -3 and 10.
8	$ -12 = 12 $	ABSOLUTE	It compares two absolute values, and both distances from zero are 12.

PART 2 • PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 • MAKE YOUR OWN (SAMPLE ANSWERS)

- **ABSOLUTE:** $|-18| > |2|$
- **ORDER:** $-18 < 2$

Challenge: $|-9| > |4|$; $-9 < 4$

Sort by what the statement compares, not only by whether it is true. For Part 2, students should name absolute value bars or explain the numbers' order on a number line.