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## WORKSHEET 1.14: FINDING ABSOLUTE VALUES <br> AND OPPOSITES

A number line is a way to picture numbers and points on a graph.


Each pair of numbers that are the same distance from 0 are opposites. For example, 1 is the opposite of -1 and -3 is the opposite of 3 . The absolute value of a number is the number of units the number is from 0 on the number line. The direction does not matter.

## EXAMPLES

$|2|$ (read "the absolute value of 2 ") $=2$ because 2 is 2 units from 0 .
$|-2|=2$ because -2 is 2 units from 0 .
$|0|=0$ because 0 is 0 units from 0 .
The opposite of -7 is 7 ; the opposite of 5 is -5 .
DIRECTIONS: Find the integer or integers described below.

1. The opposite of 6
2. The absolute value of -4
3. The absolute value of 1
4. The opposite of -5
5. The opposite of -10
6. The absolute value of 12
7. The opposite of -20
8. Two numbers whose absolute value is 8

CHALLENGE: Explain how opposites and absolute values both relate to distance. Date $\qquad$

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The opposite of -7 is 7 ; the opposite of 5 is -5 .
DIRECTIONS: Find the integer or integers described below.

1. The opposite of 6
$-6$
2. The absolute value of 1

3. The opposite of -10

4. The opposite of -20

$$
20
$$

2. The absolute value of -4

3. The opposite of -5

4. The absolute value of 12

12
8. Two numbers whose absolute value is 8

$$
8 \text { and }-8
$$

CHALLENGE: Explain how opposites and absolute values both relate to distance.

Absolute value is the number of units a number is from zero on the number line. Opposite numbers are the same distance from zero, one to the right, one to the left.

