

The **absolute value** of a number is the **distance** between that number and zero on the number line.

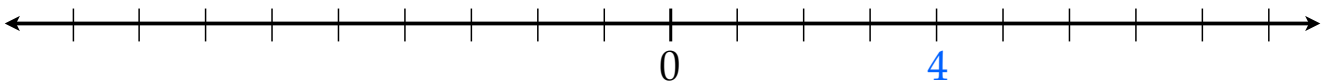
$$|4|$$

$$|-3|$$

$$|x|$$

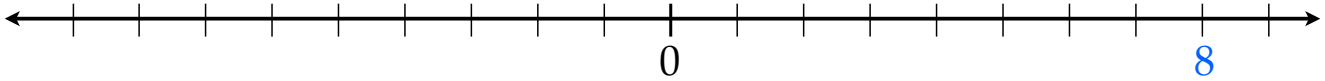
The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$|4| \quad \text{“The absolute value of 4”}$$



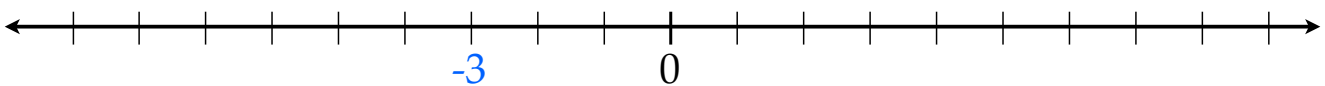
The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$| 8 | \quad \text{“The absolute value of 8”}$$



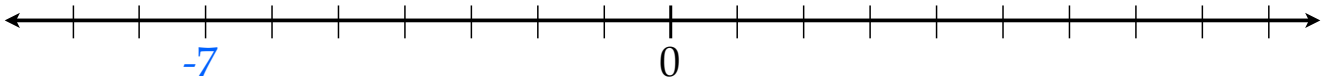
The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$| -3 | \quad \text{“The absolute value of -3”}$$



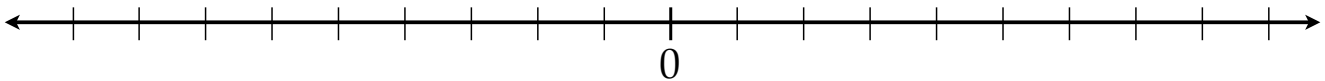
The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$|-7| \quad \text{“The absolute value of -7”}$$



The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$|4| = 4 \quad |8| = 8 \quad |-3| = 3 \quad |-7| = 7$$



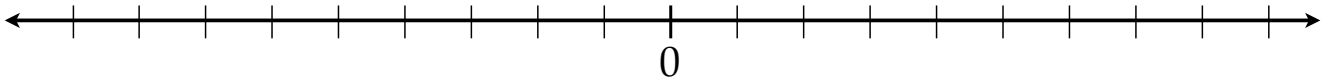
Since **distance** is always positive, the **absolute value** of a number will also be positive.

The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$|-13|$$

$$|4.5|$$

$$|-0.5|$$

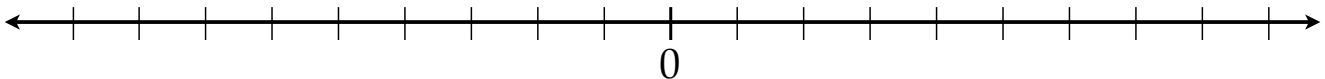


Since **distance** is always positive, the **absolute value** of a number will also be positive.

The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$|0|$$

“The **absolute value** of 0”

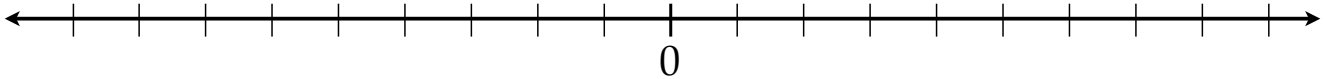


The **absolute value** of a number is the **distance** between that number and zero on the number line.

$$|x| \quad \text{“The absolute value of } x\text{”}$$

If $x < 0$ (x is negative),

If $x > 0$ (x is positive),



then $|x| = -x$

For example; $|-5| = -(-5) = 5$

then $|x| = x$

For example; $|5| = 5$