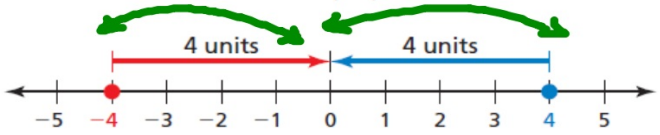
8/30 - Integers and Absolute Value (day 2)

Review of yesterday

The **absolute value** of an integer is the distance between the number and 0 on a number line. The absolute value of a number a is written as $|a|$.

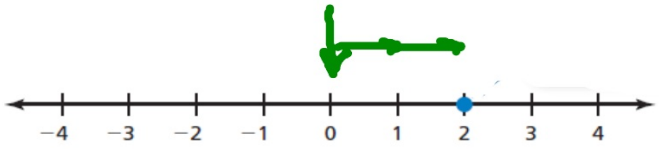


$|-4| = 4$ $|4| = 4$

* Never negative

EXAMPLE 1 Finding Absolute Value

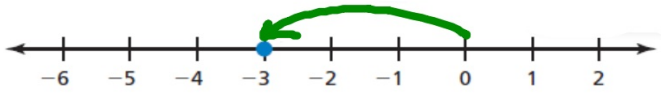
Find the absolute value of 2.



$|2| = 2$

EXAMPLE 2 Finding Absolute Value

Find the absolute value of −3.



$|-3| = 3$

On Your Own

Find the absolute value of the integer.

1. 7 **2.** -1 **3.** -5 **4.** 14

7 1 5 14

EXAMPLE 3 Comparing Values

Compare 1 and $|-4|$.

$1 < |-4|$

$|-4| = 4$

On Your Own

Copy and complete the statement using <, >, or =.

5. $|-2|$ ☐ -1

6. -7 ☐ $|6|$

7. $|10|$ ☐ 11

8. 9 ☐ $|-9|$

5. $2 > -1$

6. $-7 < 6$

7. $10 < 11$

8. $9 = 9$

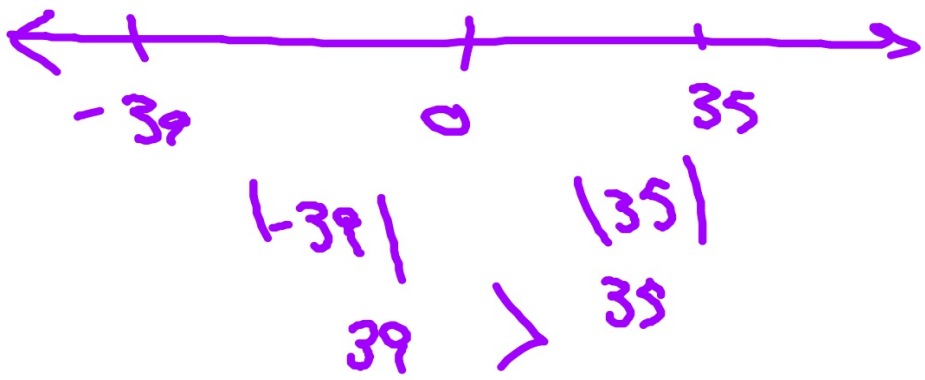
EXAMPLE 4 Real-Life Application

Substance	Freezing Point (°C)
Butter	35
Airplane fuel	−53
Honey	−3
Mercury	−39
Candle wax	55

The *freezing point* is the temperature at which a liquid becomes a solid.

a. Which substance in the table has the lowest freezing point?

b. Is the freezing point of mercury or butter closer to the freezing point of water, 0°C?



HW:

Pg 6 #4-36 all

due Wednesday