Name: _____

Rational Numbers: Interpreting Comparisons

Read each situation. Then explain what the inequality expresses. The first question is completed as an example.

1. Xiomara is visiting places in the Dominican Republic. Lake Enriquillo is 46 meters below sea level. Santo Domingo is 14 meters above sea level.

$$-46 < 14$$

-46 is less than 14. Lake Enriquillo is at a lower elevation than Santo Domingo.

2. Flynn is experimenting with sugar cookie recipes. The first recipe uses $1\frac{3}{4}$ cups of sugar. The second uses $1\frac{1}{4}$ cups of sugar.

$$1\frac{3}{4} > 1\frac{1}{4}$$

_____

_____

3. Ms. Griffith's class took a science test. Isaias's score was 1 point above the class average. Daisy's score was 1.5 points below the class average.

$$-1.5 < 1$$

_____

_____

4. Kenna tracked temperatures at 7:00 a.m. this week. Her digital thermometer read -0.6°C on Monday. On Tuesday, it read -0.8°C.

$$-0.6 > -0.8$$

_____

_____

5. Greyson is researching submarines. The test depth of *Virginia*-class subs is 240 meters. The test depth of *Seawolf*-class subs was 490 meters.

$$-490 < -240$$

_____

_____

6. Pure water freezes at 0°C (32°F). However, after Damir added some salt to a bottle of water, it stayed liquid until -4.5°C (24°F)

$$0 > -4.5$$

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ANSWER KEY

Rational Numbers: Interpreting Comparisons

Read each situation. Then explain what the inequality expresses. The first question is completed as an example.

1. Xiomara is visiting places in the Dominican Republic. Lake Enriquillo is 46 meters below sea level. Santo Domingo is 14 meters above sea level.

$$-46 < 14$$

-46 is less than 14. Lake Enriquillo is at a lower elevation than Santo Domingo.

2. Flynn is experimenting with sugar cookie recipes. The first recipe uses $1\frac{3}{4}$ cups of sugar. The second uses $1\frac{1}{4}$ cups of sugar.

$$1\frac{3}{4} > 1\frac{1}{4}$$

$1\frac{3}{4}$ is greater than $1\frac{1}{4}$. The first recipe uses more sugar than the second.

3. Ms. Griffith's class took a science test. Isaias's score was 1 point above the class average. Daisy's score was 1.5 points below the class average.

$$-1.5 < 1$$

-1.5 is less than 1. Daisy scored lower on the science test than Isaias.

4. Kenna tracked temperatures at 7:00 a.m. this week. Her digital thermometer read -0.6°C on Monday. On Tuesday, it read -0.8°C.

$$-0.6 > -0.8$$

-0.6 is greater than -0.8. It was warmer Monday morning than Tuesday morning.

5. Greyson is researching submarines. The test depth of *Virginia*-class subs is 240 meters. The test depth of *Seawolf*-class subs was 490 meters.

$$-490 < -240$$

-490 is less than -240. *Seawolf*-class subs were tested at greater depths than

Virginia-class subs.

6. Pure water freezes at 0°C (32°F). However, after Damir added some salt to a bottle of water, it stayed liquid until -4.5°C (24°F)

$$0 > -4.5$$

0 is greater than -4.5. Pure water freezes at warmer temperatures than salt water.