



Fishtank Plus Feature Sample

Problem Set

7th Grade Mathematics
Unit 2 - Operations with Rational Numbers
Lesson 2

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Name: _____

Date: _____

1. Use inequality symbols to make each statement true. (> or <)

a. 45 _____ $45\frac{1}{2}$	b. -8 _____ -10	c. -8 _____ -8.5	d. 19 _____ 0	e. -2 _____ -3
f. 5 _____ -2	g. -1 _____ -0.5	h. 5.5 _____ -4	i. -10 _____ $-10\frac{1}{2}$	j. -5 _____ -70

2. Which inequality makes the statement true?

$$-4.5 \quad | -4.5 |$$

- A. >
- B. <
- C. =
- D. None of the above

3. Which inequalities are correct? Select **all** that apply.

- A. $1 > -2$
- B. $-0.5 < -1$
- C. $-10.5 < -10$
- D. $5.8 < -6$
- E. $-5.8 > -6$

4. Consider the following two examples.

<div style="display: flex; justify-content: center; align-items: center; gap: 10px;"><div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; margin: 0 auto;"></div>><div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; margin: 0 auto;"></div>><div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; margin: 0 auto;"></div></div> <p style="text-align: center; margin-top: 10px;">$-1, -\frac{5}{4}, 0$</p>	<div style="display: flex; justify-content: center; align-items: center; gap: 10px;"><div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; margin: 0 auto;"></div><<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; margin: 0 auto;"></div><<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; margin: 0 auto;"></div></div> <p style="text-align: center; margin-top: 10px;">$-1, -\frac{5}{4}, 0$</p>
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- a. Fill in the numbers in the correct order, considering the inequality signs.
 - b. Create a new pair of greater than and less than inequality statements using three other rational numbers. Put them in increasing and decreasing order.
5. For each of the relationships described below, write an inequality that relates the rational numbers.
- a. Losing 70 dollars on a bet is worse than losing 10 dollars on a bet.

8. Which inequality below shows a true statement?

A. $-4.8 > -4.5$

B. $-4.9 < -4.7$

C. $2.15 < -5.9$

D. $0 > 8.2$

9. Amy and Stephanie had a contest to see who could swim to the deepest point underwater. Amy swam to an elevation of $-10\frac{1}{2}$ feet and Stephanie swam to an elevation of $-10\frac{3}{4}$ feet. Who swam to a greater distance below sea-level? Explain your answer.

10. Plot the following numbers on the number line below.

$$-1, \frac{1}{2}, -1\frac{3}{4}, \frac{3}{4}$$

