Name _____

LESSON 9.5
More Practice/ Homework

ONLINE Video Tutorials and Interactive Examples

Write and Graph Inequalities

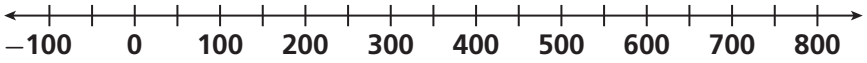
1. Regan won the grand prize at a store giveaway. The grand prize winner is guaranteed to win at least $500 in cash and prizes.

A. List three possible dollar amounts in cash and prizes Regan can win.

_____

B. Write an inequality to represent the dollar amounts d in cash and prizes Regan can win. _____

C. Graph the inequality.



2. **STEM** Alonso uses the table to help him identify an unknown mineral. He finds the specific gravity of the mineral and discovers it is less than 3.

Specific gravity	Mineral
2.16	halite
2.31 to 2.33	gypsum
2.65	quartz
2.7	calcite
3.0 to 3.3	fluorite
3.4 to 3.6	topaz
3.5 to 4	chalcopyrite
4.9 to 5.2	pyrite

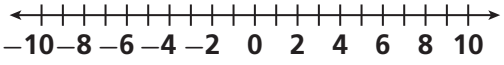
A. List three possible minerals the unknown mineral could be.

_____

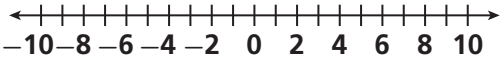
B. Write an inequality to represent the specific gravity g of the unknown mineral. _____

Math on the Spot For Problems 3–4, graph each inequality on a number line.

3. $x > -7$



4. $y \leq -5$



5. MP **Reason** When two numbers are added together, the sum is at least 100. One of the numbers is 77.

A. Which of these could be the other number? Circle the correct number or numbers.

15 9 23 41 50 20 25

B. Write an inequality to represent the possible values of the other number n.

_____

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Test Prep

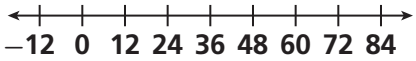
6. Children 12 and under eat free at a local restaurant. If x represents age, write an inequality to represent the ages of people who do **not** get a discount.

_____

7. It is colder than -7 °F outside. Which inequality represents the temperature t?

(A) $7 < t$ (B) $t > -7$ (C) $-7 > t$ (D) $t < 7$

8. An online retailer charges an additional fee to ship orders that weigh over 48 pounds. Write and graph an inequality which represents the weight x of online orders that result in an additional fee.



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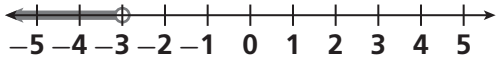
9. Draw a line to match each graph with the inequality that it represents.

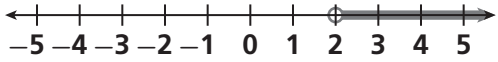
$-5 > x$

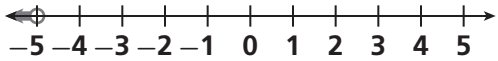
$x < -3$

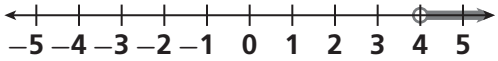
$x > 4$

$x > 2$









Spiral Review

10. Benjamin bought 4 goldfish. Each goldfish cost $1.29. How much did Benjamin spend? _____

11. A youth league soccer team has 20 students who play defender positions and 23 students who play midfielder positions. Write a ratio of students who play defender positions to the total number of students who play defender or midfielder positions. _____

For Problems 12–15, find each quotient or product.

12. $0.2 \div 4$ ☐ **13.** $3.1 \div 4$ ☐

14. 0.2×0.25 ☐ **15.** 3.1×0.25 ☐

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