Lesson 9 Practice Problems

1. a. Select **all** numbers that are solutions to the inequality $k > 5$.

    4   5   6   5.2   5.01   0.5

    b. Draw a number line to represent this inequality.

2. A sign on the road says: "Speed limit, 60 miles per hour."

    a. Let s be the speed of a car. Write an inequality that matches the information on the sign.

    b. Draw a number line to represent the solutions to the inequality.

    c. Could 60 be a value of s? Explain your reasoning.

3. One day in Boston, MA, the high temperature was 60 degrees Fahrenheit, and the low temperature was 52 degrees.

    a. Write one or more inequalities to describe the temperatures T that are between the high and low temperature on that day.

    b. Show the possible temperatures on a number line.

4. Select **all** the true statements.

      A. $-5 < |-5|$

      B. $|-6| < -5$

      C. $|-6| < 3$

      D. $4 < |-7|$

      E. $|-7| < |-8|$

(From Unit 7, Lesson 7.)

5. Match each equation to its solution.

      a. $x^4 = 81$ ○ 2

      b. $x^2 = 100$ ○ 3

      c. $x^3 = 64$ ○ 4

      d. $x^5 = 32$ ○ 10

(From Unit 6, Lesson 15.)

6.   a. The price of a cell phone is usually $250. Elena's mom buys one of these cell phones for $150. What percentage of the usual price did she pay?

      b. Elena's dad buys another type of cell phone that also usually sells for $250. He pays 75% of the usual price. How much did he pay?

(From Unit 3, Lesson 14.)

Grade 6 Unit 7

Lesson 9

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2