

Chapter 9 Practice Test

For #1 to #5, choose the best answer.

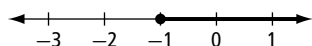
1. Karen said, "I will be out for no more than 4 h."

Let t = the time in hours.

Which inequality shows this situation?

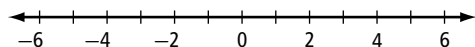
- A** $t < 4$ **B** $t \leq 4$
C $t > 4$ **D** $t \geq 4$

2. Which inequality does the number line show?



- A** $x < -1$ **B** $x \leq -1$
C $x > -1$ **D** $x \geq -1$

3. Which number is not a possible solution for the inequality $y - 2 \geq -4$?



- A** -6 **B** -2
C 2 **D** 6

4. Solve $5 - x < 2$.

- A** $x < 3$ **B** $x > 3$
C $x < 7$ **D** $x > 7$

5. What is the solution of $5(x - 3) \leq 10$?

- A** $x \leq -5$ **B** $x \geq -5$
C $x \leq 5$ **D** $x \geq 5$

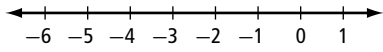
Complete the statements in #6 and #7.

6. The number line showing the inequality $x < 5$ would have a(n) _____ circle
 at 5 and an arrow pointing to the _____.
 (closed or open) (left or right)
7. The solution to $-4x < 16$ is x is _____ than _____.
 (greater or less) (-4 or 4)

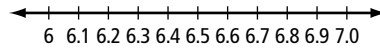
Short Answer

8. Show each inequality on the number line.

a) $x > -3$



b) $x \leq 6.8$



9. a) Verify whether $x > -3$ is the correct solution to the inequality $8 - 5x < 23$.

Check a number greater than -3 . Use $x =$ _____:

$8 - 5x < 23$

b) Is $x > -3$ the correct solution? Circle YES or NO.

Give 1 reason for your answer. _____

10. Solve each inequality.

a) $-6 + x \geq 10$

b) $12 - 8x < 17 - 3x$

Add $3x$ to both sides.

11. Show each inequality using algebra.

a) Pilots must be shorter than 185 cm.

Variable: Let $p =$ pilot's height.

Inequality: _____

b) Pilots must be at least 21 years of age.

Variable: _____

Inequality: _____

c) Luke earns \$4.75 per item sold. He must earn over \$50.

Variable: _____

Inequality: _____