

Unit 4: Linear Inequalities and Systems

PRACTICE · SET 2

Name: _____ Date: _____

Solve each problem. Show the solution set, coordinate pair, or value as indicated. Write inequality answers using x , plain-text symbols ($<$, $>$, $\leq$, $\geq$), and reduce all fractions.

1. Solve for x : $x + 7 < 12$

Answer: _____

2. Solve for x : $3x \geq 21$

Answer: _____

3. Solve for x : $x - 4 \leq -1$

Answer: _____

4. Solve for x , and remember to flip the sign: $-2x > 10$

Answer: _____

5. Solve for x : $5x + 3 \leq 18$

Answer: _____

6. Solve for x : $4x - 9 > 7$

Answer: _____

7. Solve for x and give the answer as a fraction: $2x < 3$

Answer: _____

8. Solve for x , and remember to flip the sign: $8 - x \geq 2$

Answer: _____

9. Solve for x : $3(x + 2) \leq 15$

Answer: _____

10. Solve for x : $6x + 5 > 2x + 21$

Answer: _____

11. Is the point $(2, 5)$ a solution to the inequality $y > 2x$? Answer yes or no.

Answer: _____

12. The system $y \geq x + 1$ and $y \leq 4$ has a solution at the point $(2, b)$ where b is the largest integer that works. What is b ?

Answer: _____