**Unit 4 Test-Inequalities** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1. Which number is a solution to the inequality below? **x > 4**  A. 1 B. 2  C. 4 D. 5 | 2. Which number is NOT a solution to the inequality below? **x < 8**   1. 6 B. 7   C. 8 D. 9 |
| 3. Which statement describes “a number more than 22”?   1. x < 22 B. x > 22 2. x < 22 D. x > 22 | 4. Which statement describes “ a number less than or equal to 43”?   1. x < 43 B. x > 43   C. x < 43 D. x > 43 |
| 5. Which statement describes “ a number no more than 17”?  A. x < 17 B. x > 17  C. x < 17 D. x > 17 | 6. Which statement describes “at least 32”?   1. x < 32 B. x > 32   C. x < 32 D. x > 32 |
| 7. Which number is a solution to x + 4 > 12   1. 3 B. 5   C. 7 D. 9 | 8. Which number is **NOT** a solution to  x – 3 < 10   1. 7 B. 8 2. 10 D. 14 |
| 9. Which number is a solution to  3x > 12   1. 4 B. 5 2. 2 D. 3 | 10. Which number is **NOT** a solution to  2x < 10   1. 3 B. 4 2. 5 D. 6 |
| 11. Which inequality matches the graph below? | 12. Which inequality matches the graph below? |
| 13. Which inequality matches the graph below?  [Number Line](http://www.mathwarehouse.com/number-lines/inequality-outputter.php?&w=400&sineq=3&etype=22&startAt=-5&endAt=5&label=labelall&bg=FFFFFF&random=128&download=1)   1. x > 3 b. x > 3 2. x ≤ 3 d. x ≥ 3 | 14. Which inequality matches the graph below?  [Number Line](http://www.mathwarehouse.com/number-lines/number-line-outputter.php?s=-7&e=7&w=300&label=labelall&endtype=arrows&inc=1&bg=FFFFFF&col=000033&download=1)   1. n < 0 b. n ≤ 0   c. n ≥ 0 d. n > 0 |
| 15. Solve x + 11 > 19 | 16. Graph the solution to the inequality from question #15.  Number Line |
| 17. Solve x – 3 < 5 | 18. Graph the solution to the inequality from question #17.  Number Line |
| 19. Solve 3x < 12 | 20. Graph the solution to the inequality from question #19.  Number Line |
| 21. Solve > 2 | 22. Graph the solution to the inequality from question #21.  Number Line |
| 23. Write an inequality for this statement “x is less than or equal to 7”. | 24. Write an inequality for this statement  “x is greater than -9” |

25. Describe the difference between an open and a closed circle when graphing an inequality.

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