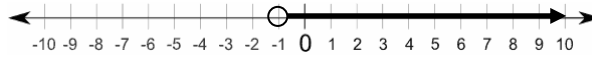Name: _____   Date: _____   Period: _____
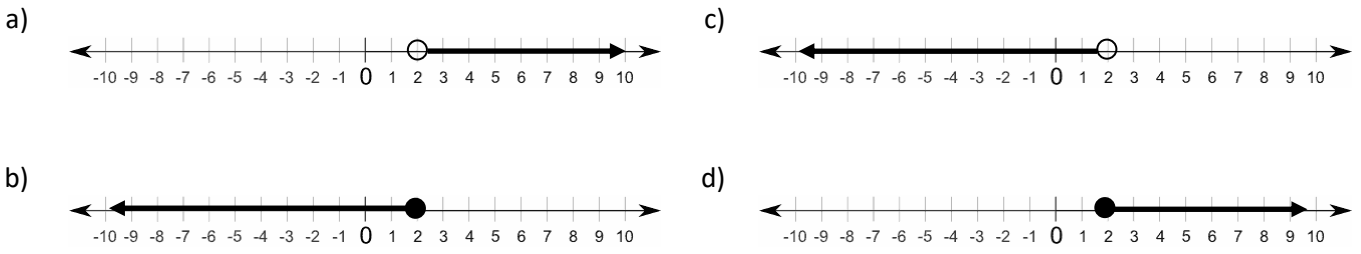
Answer the following questions about inequalities.

1. What inequality is represented by the graph below:
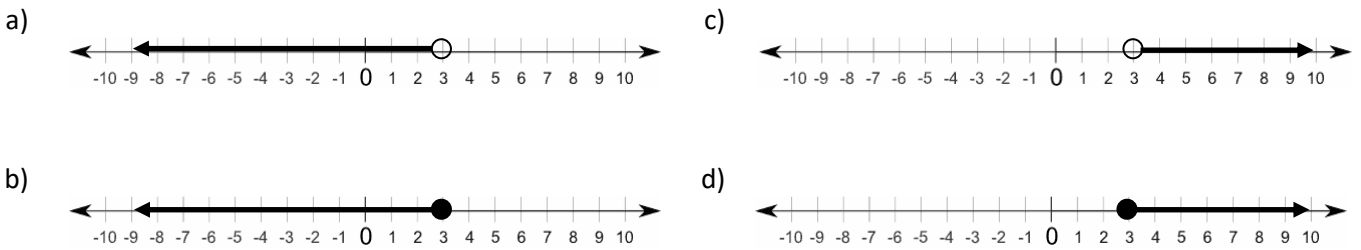

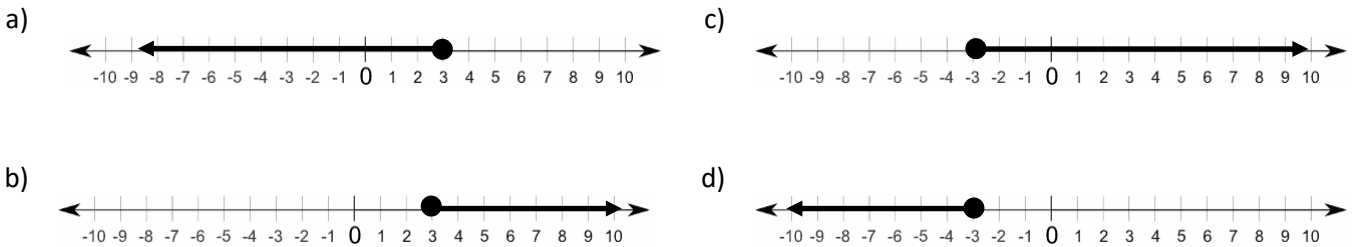   a)   x ≤ -1   b)   x > -1   c)   x < -1   d)   x ≥ -1

2. Which one of the following graphs represents the solution set of x ≥ 2?

    a)

    c)

    b)

    d)

3. Which one of the following graphs represents the solution of the inequality 2x + 3 > 9?

    a)

    c)

    b)

    d)

4. Which one of the following graphs represents the solution of the inequality -3x + 1 ≤ 10?

    a)

    c)

    b)

    d)

5. What inequality is the solution of x + 78 ≥ 14

    a)   x ≥ 92   b)   x ≥ -64   c)   x ≥ 64   d)   x ≤ -92
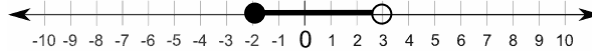
6. The smallest whole number that satisfies the inequality 3x − 1 > 2 is

    a)   2   b)   0   c)   3   d)   1

7. Which one of the following numbers is not a member of the solution set of $5x \le 23$

    a) 4.7   b) 4.6   c) 0   d) -4.7

8. What inequality is represented in the graph below?

    a) $-2 < x < 3$ b) $-2 < x \le 3$ c) $-2 \le x < 3$ d) $-2 \le x \le 3$

9. If y is an integer, what is the solution set of $-3 \le y < 2$?
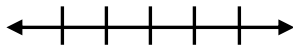
    a) {-2, -1, 0, 1, 2}   c) {-3, -2, -1}

    b) {-3, -2, -1, 0, 1}   d) {0, 1}

10. What inequality is equivalent to $2x - 1 > 5$?
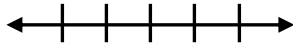
    a) $x > 6$ b) $x > 3$ c) $x < 3$ d) $x > 2$

SOLVE the inequalities on a separate sheet of paper but graph each inequality on this page. Remember, if cross multiplying, keep your answer to the cross-multiplication UNDER the numerator you used.
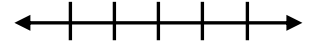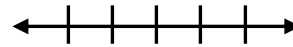
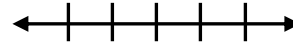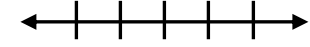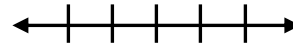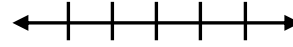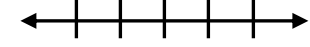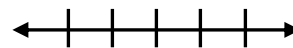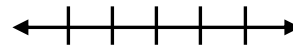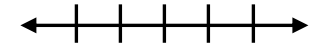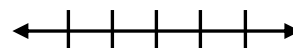|		
11. $-3(p + 1) \le -18$	12. $-4(-4 + x) > 56$	13. $-11x - 4 > -15$
14. $-7x + 7 \le -56$	15. $-4(3 + n) > -32$	16. $-132 > 12(n + 9)$
17. $-3(r - 4) \ge 0$	18. $-3(p - 7) \ge 21$	19. $-90 \ge -5(k - 3)$
20. $-1 \le \dfrac{v - 2}{21}$	21. $\dfrac{-9 + a}{15} > 1$	22. $-1 > \dfrac{12 + x}{4}$
23. $\dfrac{-11 + n}{15} < -1$	24. $7n - 1 > -169$	25. $84 \ge -7(v - 9)$

Inequality Practice 1