

Name _____

Date _____ Class _____

Inequalities Review

Graph the following on the number line.

1. $x \leq 3$

2. $y \geq -5$

3. $k < 5$

4. $j > -6$



Solve, graph and check.

5. $2a - 5 > 17$

6. $-5d + 7 \geq -38$

7. $\frac{b}{-2} - 12 \leq 11$

8. $-12 + 11y < 54$

9. $\frac{c}{4} + 7 < -6$

10. $-3(m - 2) > 12$

11. $10y + 4 < 7y - 29$

12. $5 + 9a < -19$

Write an inequality to represent each situation. Then solve, graph and check.

13. Six more than the product of 3 and a number is less than 39.

14. Five less than half a number is greater than 16.

15. The owner of a lawn mower repair shop charges \$5 to diagnose the problem. He then charges \$30 per hour to fix the problem. If he estimates that the total cost will be no more than \$50, how many hours can he work and still be within his estimate?

16. You earn \$8 per hour plus a bonus of \$10. You want to earn at least \$60. How many hours do you have to work?