

Algebra 1
5.5-5.7 Quest Review

Word Problems Review define your variables and set up a system of inequalities (don't solve)

1. Your spare time must not exceed a maximum of 20 hours a week and your weekly allowance is \$70. You need to pay \$5 an hour for playing video games and \$2 an hour for bowling. Write a system of linear inequalities that represent the situation.
2. Joe wants to buy 10 books at the book store. Comic books cost \$10 each and fiction books cost \$12 each. He has \$100 worth of Birthday money. Write a system of linear inequalities that represent the situation.

Inequality Review solve the following problems and plot on a number line:

3. $x > 6$
4. $8x - 9 \geq 21 - 2x$
5. $-3 \leq x < 7$
6. $-1 < 3 + x \leq 8$
7. $8 - 2x > 26$

Graphing Review graph the following on graph paper. Be sure to show a check.

8. $y \leq 8 - \frac{3}{4}x$
9. $y < x$
10. $3x - 4y \leq 12$
11. $y \leq -2$

Graphing Systems of Inequalities graph the following on graph paper. Be sure to show a check.

12. $y < 8 - 5x$
 $y > -4 + \frac{2}{3}x$
13. $x > -3$
 $y \leq 8$
14. $5x - 4y < 20$
 $3x + 4y < 12$
15. $y > x$
 $5x + 7y \geq -28$