**Final Review**

Choose the letter of the property that best matches each statement.

1. Additive Identity
2. Distributive Property
3. Commutative Property
4. Associative Property
5. Substitution
6. Addition Property of Equality
7. Multiplicative Inverse
8. Multiplicative of Zero
9. Multiplication Property of Zero
10. Additive Inverse
11. Symmetric Property of Equality
12. Multiplicative Identity
13. For any number a, a + 0 = 0 + a = a
14. For any number a and b, if a + b then b + a
15. For any numbers a and b, if a + b = 0 then a = 0 or b = 0
16. For any numbers a, b, and c, a(b + c) = ab + ac
17. For any number a, a 1 = a

Rewrite each product using the **Distributive Property**. Then simplify.

6. 3 ( 1/3 – p )

7. 8x – 2(x + 4)

Simplify each expression. If not possible, write simplified. **Name the property used in each step.**

8. 6 ( 2n – 4 ) + 5n

9. 4 – 5( 3x – 4b ) + 4b

Solve each equation or inequality.

10. 7 – x ≤ 3

11. 

12. 

13. 6 ≥ 4 – 3x

14.

a) What is the slope-intercept form of 5x – 2y = 12?

b) What is the slope and y-intercept of the line? Is the line rising or falling?

c) Graph the line.



15.

a) What is the slope-intercept form of 3x – y = 6?

b) What is the slope and y-intercept of the line? Is the line rising or falling?

c) Graph the line.



Graph the following inequalities.

16. 4x – 3y ≥ 15

17. y > -2

Factor the following expressions.

18**. 12b2cd - 18bcd**

**19. 12b2cd - 18bcd + 24bd**

20. Kelly plans to put her graduation money into an account and leave it there for 4 years while she goes to college. She receives $750 in graduation money that she puts it into an account that earns 4.25% interest compounded semi-annually. How much will be in Kelly’s account at the end of four years?

21. You deposit $50 into an account with 6.8% simple interest. What is the interest after five years?

22. Kyle deposits $1600 into an account with 5.4% interest, compounded semi-annually. If Kyle does not deposit or withdraw any money for five years how much will be in the account?