HW 6

HW #6: Test Review

Name: _____

Date: _____ Block: ____

When graphing inequalities, remember!!!

- Draw a number line. Label three numbers (one to either side of the solution).
- When you multiply or divide by a negative number, you must switch/reverse the inequality sign!
- Use **open circle** at number for > or <. That means the number **is not** included in the solution.
- Use **closed circle** at number for ≥ or ≤. That means the number **is** included in the solution.

Graph the following inequalities.

1. $y < -1$ 

2. $5 \leq m$ 

Write the inequality represented in the graph.

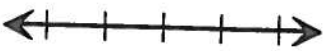
3.  _____

4.  _____

Solve the following inequalities. Then graph your solutions.

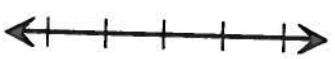
5. $v + 7 > -4$

6. $t - 4 \geq 5$



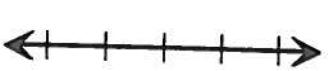
7. $1.75 + x < 7.3$

8. $-8.1 + s \leq 6.5$



9. $7y \leq -21$

10. $-6n > 6$



11. $\frac{2}{3}r > 24$

12. $5 - 6g \leq 21$

13. $-6x + 8 > -3$

Equations

14. $x+(-8)=9$

15. $n-7=3.65$

16. $0.48g=2.4$

17. $\frac{1}{5}k=2\frac{2}{7}$

18. $2r+16=32$

19. $-12=4-x$

Vocabulary and Introduction to Algebra

20. (Circle) the **constant(s)** and draw a box around the **coefficient(s)** in the expression: $2x-4rt+8$

21. Define the following terms:

a) expression: _____

b) solution: _____

22. Place the words given below in the correct column.

Word Bank

sum	divided by	fewer	decreased by	twice
product	total	more	quotient	per
difference	less	increased by	times	of

Addition	Subtraction	Multiplication	Division

23. What is special about the word **"than"** when translating?

_____

Review Material

24. Give an example of each subset from the **Real Number System**:

Natural:

Whole:

Integer:

Rational:

Real:

Irrational:

25. Match the name of the **property** on the left with the example on the right:

Commutative •	• (5)(1) = 5
Associative •	• (4)(3)(0) = 0
Distributive •	• 3(x + 2) = 3x + 6
Property of Zero •	• 3 + -3 = 0
Additive Inverse •	• 4+5 = 5+4
Multiplicative Inverse •	• 3+(4+6) = (3+4)+6
Identity •	• $\frac{1}{3}+3=1$

26. Three examples of a **perfect square** would be: _____ _____ _____

27. Write an expression and find the sum of the following model: ●●●●+○○○○○=

28. What would the number line and chips models of 3 – (-2) look like?

29. Evaluate:

a. $4-(-3)=$

b. $12+(-7)=$

c. $-4 \bullet -12=$

d. $-15 \div 3=$

Evaluate .

30. $4(-2)^2+3+2 \bullet 5$

31. $\frac{2}{3}+1\frac{4}{9}=$

32. $-4\frac{2}{5} \div 3\frac{3}{10}$