

## Algebra Test 2 Study Guide

Name: \_\_\_\_\_

Color Group: \_\_\_\_\_

1) Know your Properties! Write them and their definitions here.

2) Be able to convert a math sentence into an algebraic expression

eg: Twice a number plus 5

The product of X and 5

The ratio of a number and 15

3) Know the difference between an algebraic expression, an equation, and an inequality. Explain using the space provided

4) Be able to solve one step equations.

eg:  $x+11= 16$

$2x = 10$

$$x/4 = 14$$

$$x + 20 = 15$$

5) Be able to plug in a value for X and Y in order to solve the algebraic Expression

eg:  $X = 3$ ,  $y = 10$

$$X + 5 = 10$$

$$2x + y$$

$$5x$$

$$10 + y$$

6) Simplify the following by combining like terms

$$3x + 4 + 5y + 10x$$

$$4x + 5y - 3x + y + y + x + 15 + 20$$

7) Solve and Graph the inequalities.

$$3x > 5$$

$$x/4 < 16$$

$$-3x \geq 15$$

$$6 + y < 30$$