The background is a light gray rectangle filled with various geometric shapes. There are several overlapping circles of different sizes, some solid and some outlined. There are also curved lines and a square containing a circle on the left side. On the right side, there are three horizontal lines stacked vertically.

**Math**  
**Monday 3/27/2017**

We are going to correct your homework from Friday quickly before working on today's materials.

Today you will receive a study guide.

Your study guide is due **WEDNESDAY**

Your test is on **THURSDAY!** (Because we have no school on Friday)

Your additional homework this week will be to study and to practice the things that will be on the test.

Topics that will be on your test:

- translating equations and inequalities
- parts of an algebraic expression
- properties
- solving equations for  $X$
- plugging in given values for  $X$  in an algebraic expression and simplifying
- combining like terms
- solving and graphing inequalities

## Translating equations and Inequalities

This means translating phrases into math.

eg: Three times a number

Three times a number is equal to forty  
five

Three times a number is less than forty  
five

These you do not have to solve, just re-write

Parts of an algebraic expression

We have been having trouble on this on the past few tests and quizzes

Identify the variable, coefficient, and constant

$$3x+1$$

# Properties

You need to memorize them

- Commutative property of multiplication
- Commutative property of addition
- Additive identity
- multiplicative identity
- Associative property of multiplication
- Associative property of addition
- Distributive property
- Multiplicative property of zero

## Solving Equations

EG:

$$2x = 15$$

$$3+x = 45$$

$$x/6 = 30$$



## Plugging in Values for X in Algebraic Expressions

Given that  $X = 5$  and  $y = 3$ , solve the following:

$$x + 5$$

$$3x + y$$

$$4y + 5x$$

## Combining like terms

Remember circling and putting squares around different types of terms? That's what we'll be doing here!

Eg:

$$3x + 4y + 45 - 15 + x$$

$$4y + 5x + x + 13 - 2x$$

## Solving and graphing inequalities

This is what we were working on just before the break

Solve and Graph:

$$3x > 15$$

$$x+5 < 15$$

**Remember: If you need additional materials to help you study, just ask! Or, check out:**

- **Khan Academy**
- **Math Antics**
- **Your class website**
- **come to tutoring on Tuesday**

**It is YOUR responsibility to be prepared for your end of unit test on Thursday.**

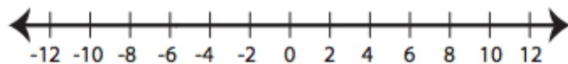
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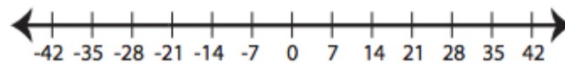
### Solving & Graphing Inequalities

Solve each inequality and graph the solution.

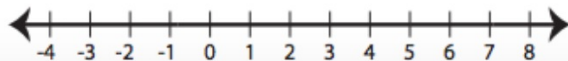
1)  $x - 2 > 4$



2)  $\frac{x}{3} \leq 7$



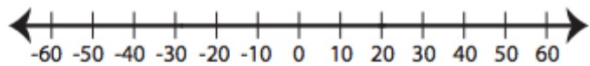
3)  $6x < 30$



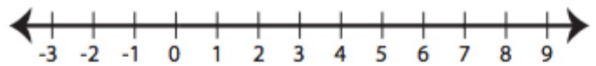
4)  $x + 9 \geq 11$



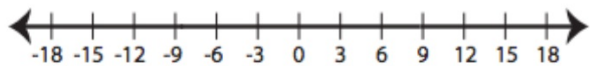
5)  $\frac{x}{2} \geq 10$



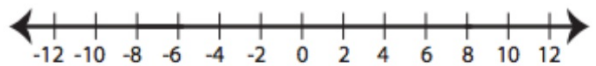
6)  $x - 5 \leq 2$

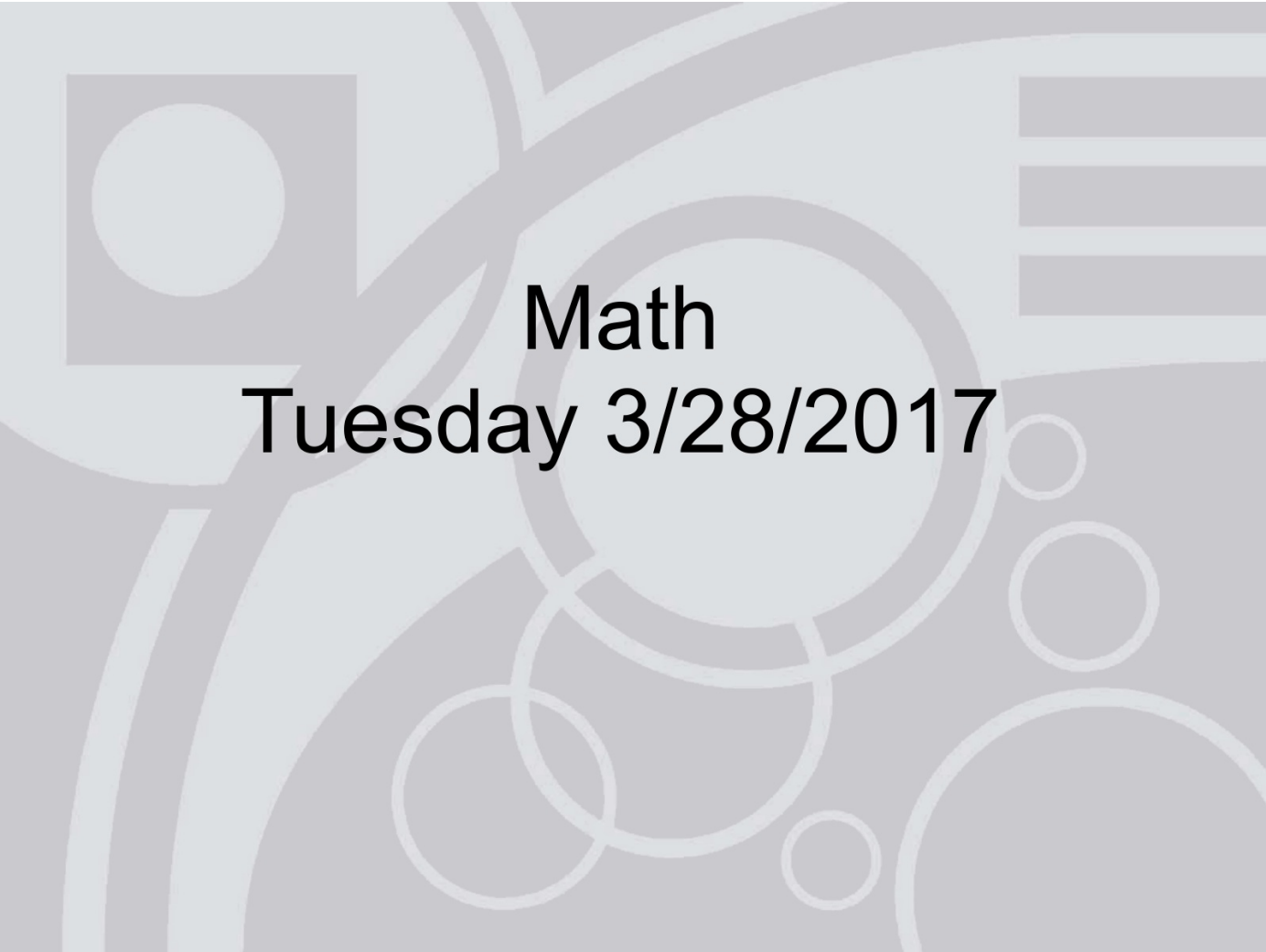


7)  $7 + x < 16$



8)  $4x \geq 32$



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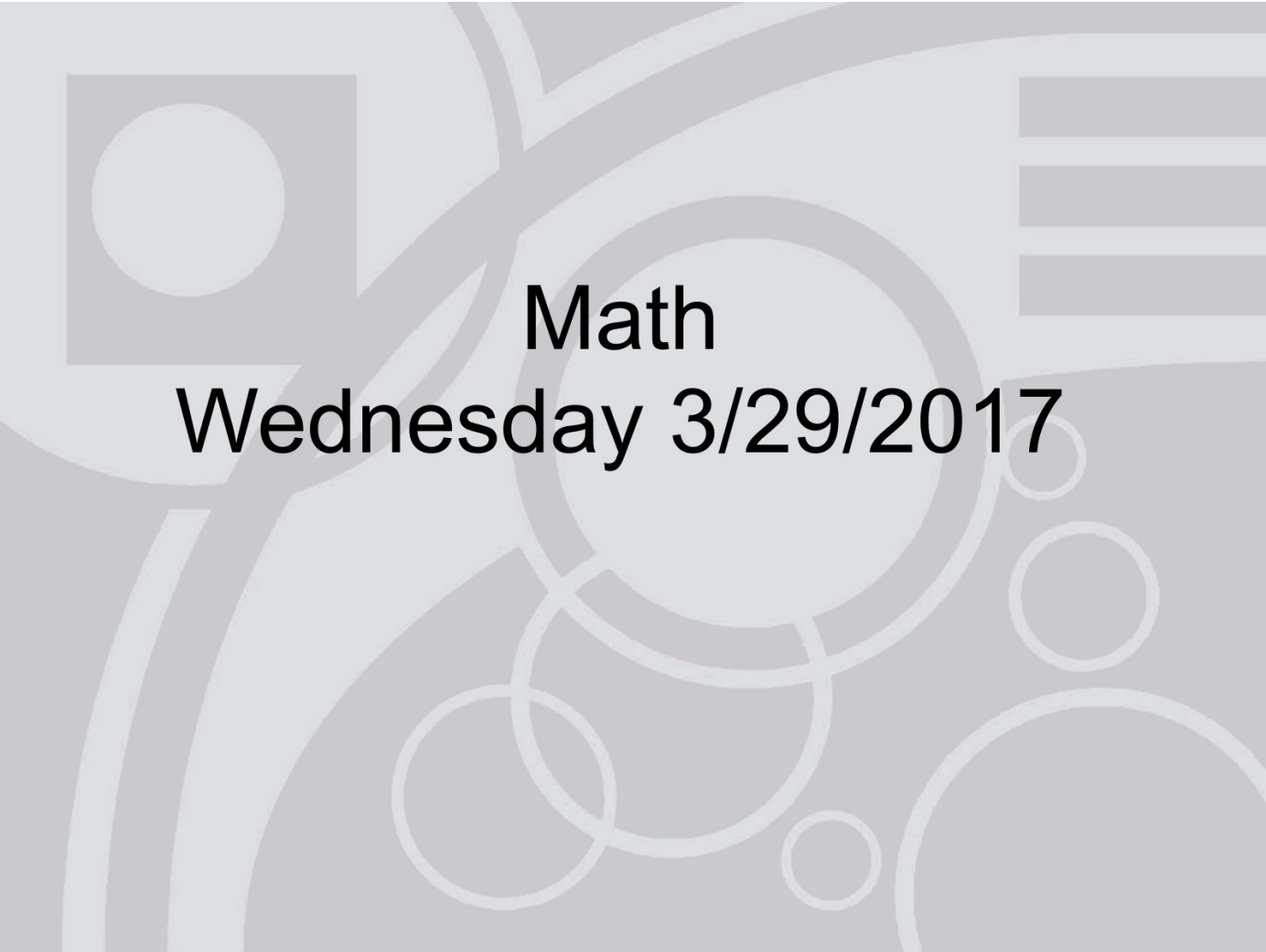
**Math**  
**Tuesday 3/28/2017**

There are questions posted around the classroom

You will have 2 minutes to complete each station. In a moment, you will receive a number that will tell you which station to start at. You **MUST** work in your assigned group.



**Are there any questions before we begin?**



**Math**  
**Wednesday 3/29/2017**

**GET YOUR STUDY GUIDE OUT**

**Its time to go over it!**

Algebra Test 2 Study Guide

\_\_\_\_\_

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

Show your Properties! Write them and their definitions here.

able to convert a math sentence into an algebraic expression

twice a number plus 5

product of X and 5

ratio of a number and 15

Show the difference between an algebraic expression, an equation, and an inequality. Explain using the space provided

able to solve one step equations.

$$-11 = 16$$

0

$$4 \\ = 15$$

able to plug in a value for X and Y in order to solve the algebraic  
ision

$$= 3, y=10$$

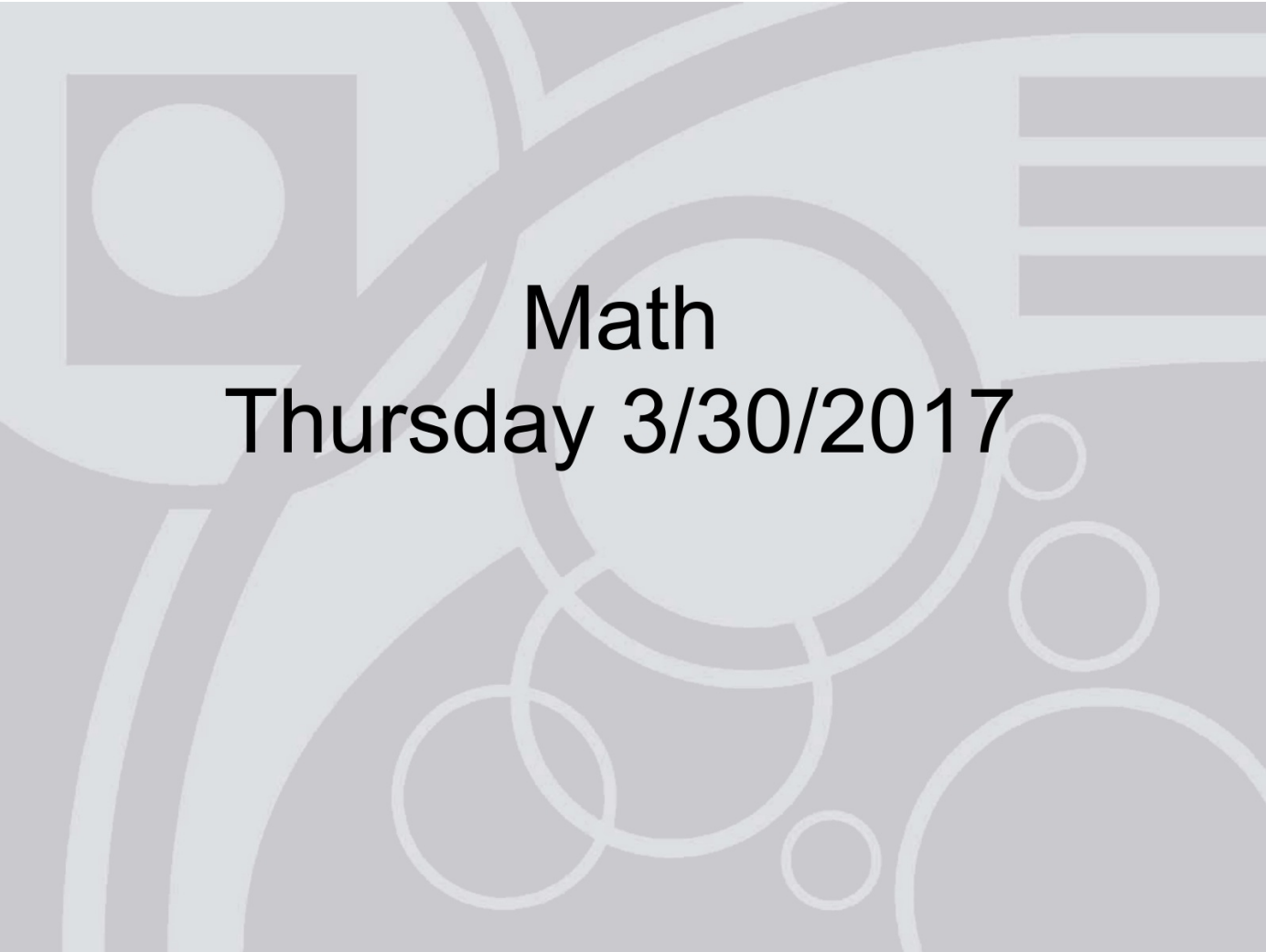
10

implify the following by combining like terms

$$5y+10x$$

$$3x+y +y +x +15 +20$$

d Graph the inequalities.



**Math**  
**Thursday 3/30/2017**

Clear your desk! Its  
**TEST TIME!**