

Name \_\_\_\_\_

Date \_\_\_\_\_

Algebra 1  
2018 Summer Packet

\*The packet will be collected when we get back to school and will count as a test grade. Effort is the biggest thing.

Solve for x

1.  $-7x - 7 = -8x$

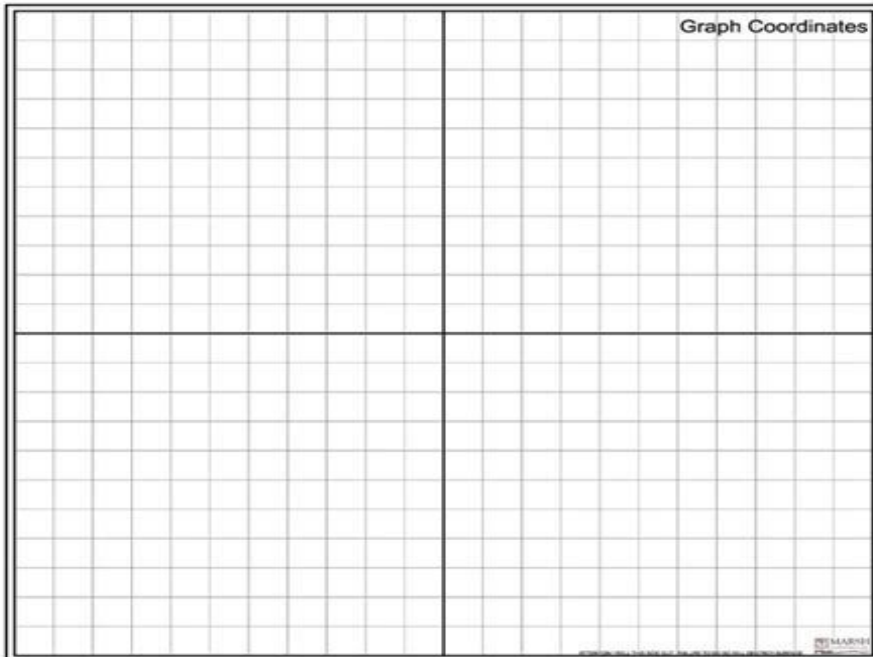
2.  $3 - 10x = 6x - 1$

3.  $-6 - 4x = 8x$

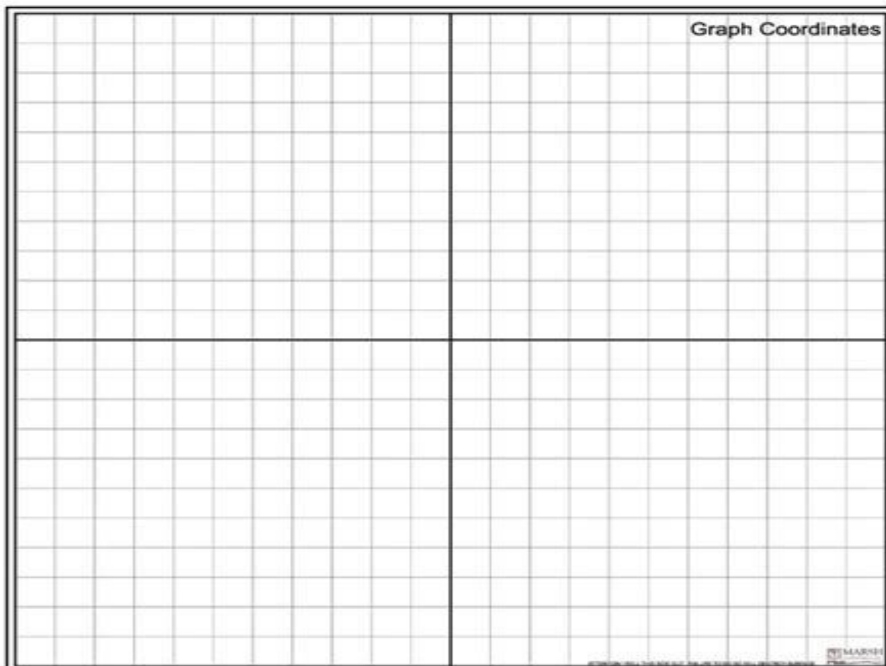
4.  $4x + 3 = 10x$

Graph the following lines

5.  $Y = 3x - 3$



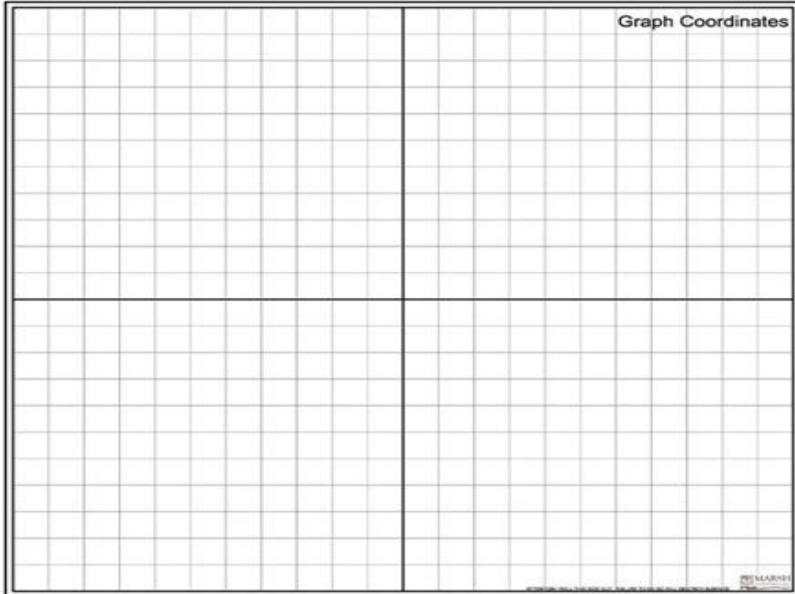
6.  $3y - 9x = 3$



Solve the system of Equations by graphing

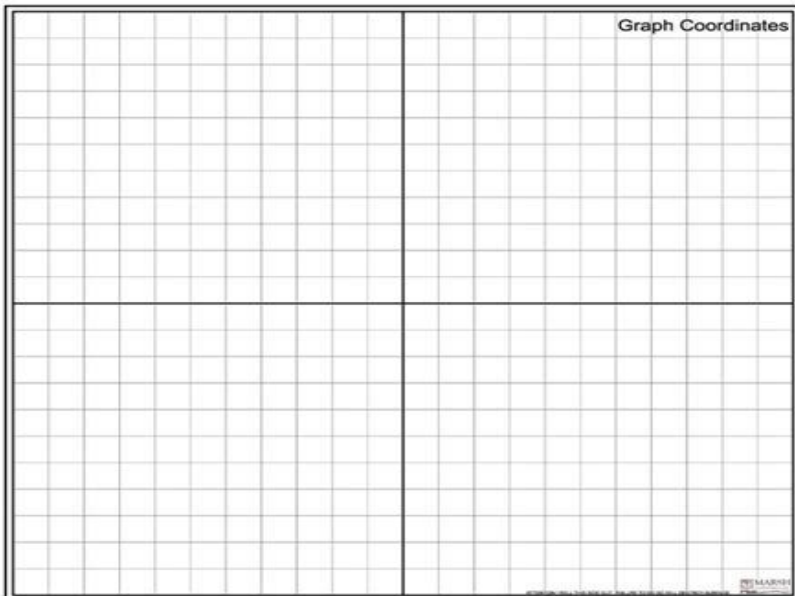
7.  $Y = 3x - 5$

$Y = -2x + 4$



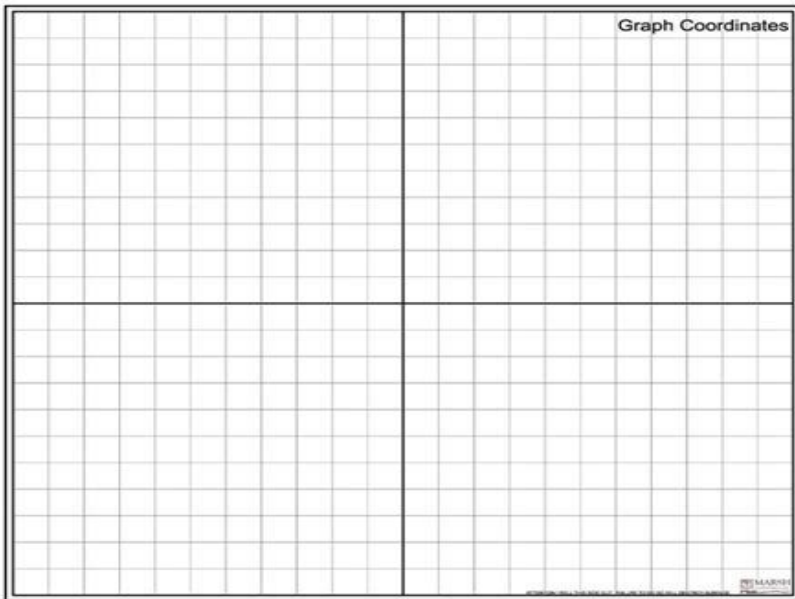
8.  $Y = -x + 3$

$Y = x + 1$



Graph the Inequality

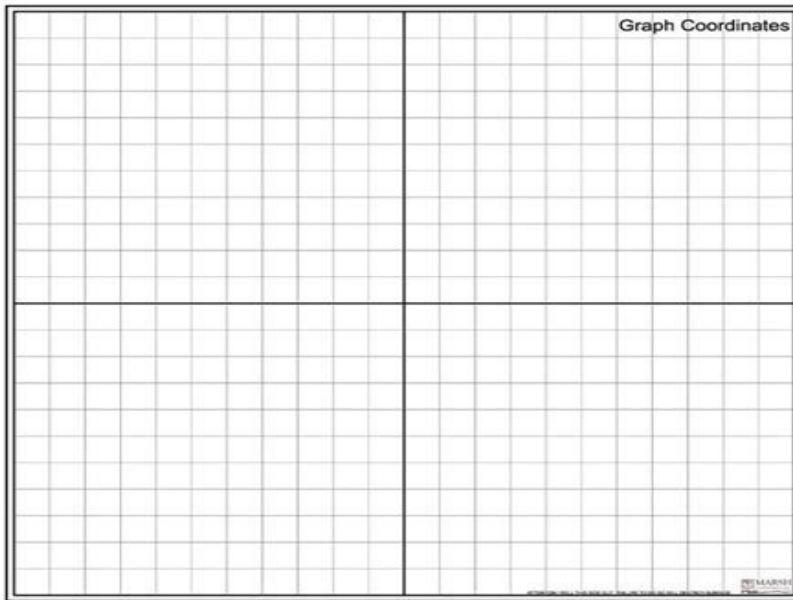
9.  $Y > 3x - 3$



Graph the System of inequalities

10.  $Y > x - 3$

$Y > -2x + 4$



11.  $(f) = 3x + 2$

$f(1) = \underline{\hspace{2cm}}$

$f(5) = \underline{\hspace{2cm}}$

$f(3) = \underline{\hspace{2cm}}$

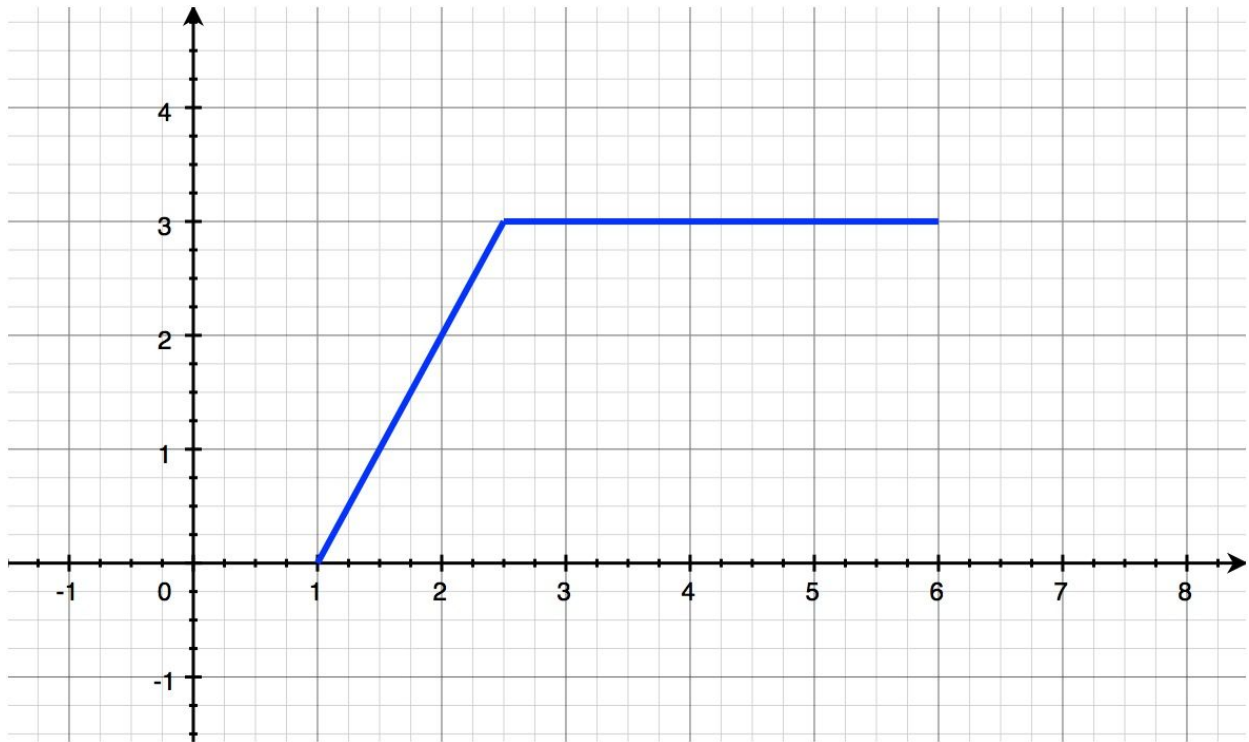
$f(7) = \underline{\hspace{2cm}}$

$F(x) = 8$

$F(x) = 14$

$f(x) = 20$

$f(x) = 11$

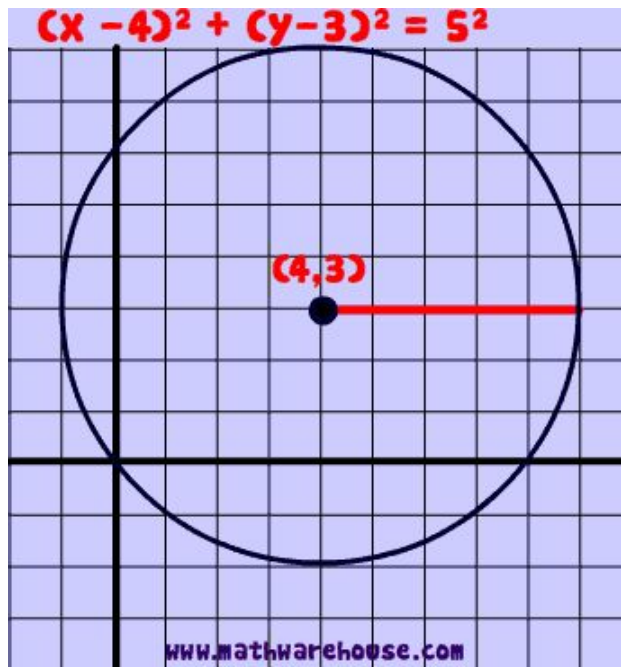


12. Use the vertical line test to determine if this is a function.

13. What is the domain?

14. What is the Range?

15. Use the vertical line test to see if this is a function



Multiply the following polynomials.

16.  $(2x^2 + 2x + 2)(x^2 + 2)$


17.  $(4x^2 + x + 1)(x - 1)$


Solve the following system of equations by elimination

18.  $x - y = 11$   
 $2x + y = 19$

19.  $16x - 10y = 10$   
 $-8x - 6y = 6$



## Links for topics

Solving Equations with variables on both

[//www.khanacademy.org/math/algebra/one-variable-linear-equations/alg1-variables-on-both-sides/v/equations-3](https://www.khanacademy.org/math/algebra/one-variable-linear-equations/alg1-variables-on-both-sides/v/equations-3)

<https://www.khanacademy.org/math/algebra/one-variable-linear-equations/alg1-variables-on-both-sides/v/why-we-do-the-same-thing-to-both-sides-multi-step-equations>

Graphing Linear Equations

<https://www.khanacademy.org/math/in-in-grade-9-ncert/in-in-chapter-4-linear-equations-in-two-variables/in-in-graph-of-a-linear-equation-in-two-variables/v/graphs-of-linear-equations>

Solving Systems of Equations by Graphing

<https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-systems-topic/cc-8th-systems-graphically/v/solving-linear-systems-by-graphing>

Graphing Inequalities

<https://www.khanacademy.org/math/algebra/two-variable-linear-inequalities/graphing-inequalities/v/graphing-inequalities>

Graphing Systems of Inequalities

<https://www.khanacademy.org/math/algebra/two-variable-linear-inequalities/graphing-inequalities/v/graphing-systems-of-inequalities-2>

## Evaluating Functions

<https://www.khanacademy.org/math/algebra/algebra-functions/evaluating-function-s/v/understanding-function-notation-example-1>

## Domain and Range of a Function

<https://www.khanacademy.org/math/algebra/algebra-functions/domain-and-range/v/domain-and-range-from-graphs>

## Multiplying Polynomials

<https://www.khanacademy.org/math/algebra/introduction-to-polynomial-expressions/multiplying-polynomials-by-binomials/v/more-multiplying-polynomials>

## System of Equations by Elimination

<https://www.khanacademy.org/math/algebra-home/alg-system-of-equations/alg-equivalent-systems-of-equations/v/solving-systems-of-equations-by-elimination>

## Lesson Plan 6/4-6/6

### Pre Final Final Assessment Review

Review based on basic model of what will be on the final and what the final will actually look like.

Review/Final Topics will include,

- solving equations with variables on both sides.
- graphing lines and inequalities.
- solving systems of inequalities graphically.
- solving systems of equations both graphically and by using elimination method.
- evaluating functions for a given  $x$  value, as well as solving for  $x$  when a given value for the function is given.
- Vertical line test of functions, domain and range
- Multiplying polynomials

Common Core Standards: Numerous

Plan is to move through a relatively quick pace, but being sure to field questions as they arise. These topics have been reviewed already over the last few weeks. Pace will be based on need to finish by Wednesday at latest so they will have at least two full class periods to complete test.





