

# Notes for September 16th to the 20th - ALG II

Standard for the week (**bold** → emphasized;  $\equiv$  → important on regents)

## - ALG I STANDARDS:

- A-SSE.A.1 1. Interpret expressions that represent a quantity in terms of its context
- A-REI.A.1a 1a. Explain each step when solving a linear or quadratic equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
- A-REI.B.3 3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
- S-ID.C.8 8. Calculate (using technology) and interpret the correlation coefficient of a linear fit.

Monday: Goal: all types of simple linear equations -

find your seat

take out hw

get worksheet

form group

introduce yourself: Name Studio Middle School

Period	Teacher	Room
4	Pflaum/Tsakalakos	425
5	Law/Lee	413
6	Abrams/Sefaj/Lawton	415
7	Fischer/Lin	415
8	Marino/Schechter	631

Fix [All Regents equations](#)

[seating chart](#)

## **Fire drill 10th**

1b) Twice a number less than 5
$5 - 2x$
$2(5 - x)$
$2(x-5)$

**What's the diff between 11 and 12: 12) Simplify:  $-4^2+17$  11) Simplify:  $(-4)^2+17$**

4)  $4r$  added to 15 less than three times  $r$  equals 6.

$3r - (4r + 15) = 6$	$-r = 9$	$r = -9$
$4r + 15 - 3r = 6$	$r = -9$	
$r = 3$		
$3r - 15 + 4r = 6$		
$4r + (3r - 15) = 6 + 9$	$r = 4.285714$	
dont understand		

12 What is the solution for the equation  $x + 1 = x + 2$ ?

- |                  |                          |
|------------------|--------------------------|
| 1) $-1$          | 3) all real numbers      |
| 2) $\frac{1}{2}$ | 4) There is no solution. |

\* What is the solution for the equation  $3(4x + 6) = 8x + 4(x + 4) + 2$ ?

- |                  |                          |
|------------------|--------------------------|
| 1) $-1$          | 3) all real numbers      |
| 2) $\frac{1}{2}$ | 4) There is no solution. |

### [All Regents equations](#)

Tuesday: Goal Rational equations

11) $(3x - 8)/-15 = 4$	$\frac{3x-8}{-15} = 4$
$x = -17$ and $1/3$	
$x = -52/3$	
I think this has no real or possible answer.	

15) Tim ate four more cookies than Alice. Bob ate twice as many cookies as Tim. If  $x$  represents the number of cookies that Alice ate, which expression represents the number of cookies that Bob ate? Write a legend and justify your answer. LEGEND:

$x$  = number of alic cookies  $x + 4$  = time  $2x + 8$  = bob

$x$  = # of cookies Alice eats  $x + 4$  = # Tim eats  $2x + 8$  = # Bob eats

$$b = 2(x + 4)$$

$$2(x + 4)$$

$$\text{Tim} = y \quad \text{Alice} = x \quad \text{Bob} = n \mid y = x + 4 \quad n = 2y$$

[Solving rational equations - where undefined](#)

Wednesday: Word problems:

MAatching?

Fire drill 8th

[word problems](#) match with [equations](#)

[word problem lesson](#)

Thursday: Literal Equations

[Literal Equations](#)

Can't be? Solution?

$$2) \quad \frac{x + 9}{x - 7} = 3$$

$$3) \quad \frac{3x}{x + 2} = 2$$

**Tara's Work**

$$\begin{aligned}& [4(10) - 3^2] + 6(4) \\&= [4(10) - 9] + 6(4) \\&= 4(1) + 6(4) \\&= 4 + 6(4) \\&= 4 + 24 \\&= 28\end{aligned}$$

**Curtis's Work**

$$\begin{aligned}& [4(10 - 3^2) + 6(4) \\&= [4(10) - 9] + 6(4) \\&= [40 - 9] + 6(4) \\&= 31 + 6(4) \\&= 31 + 24 \\&= 55\end{aligned}$$

Friday:

Literal Equations II [Literal Equations II](#)

Consecutive integers. Sum of 3 cons odd integers is 33.

Sum of 4 consecutive even integers is 36.

Sum of 2 consecutive integers is 19.

Three times the smallest of three consecutive even integers is 18 more than the sum of the middle and larger integers. What are the integers?

**The sum of 6 consecutive odd integers is 96 . What are the integers**

[Writing and interpreting linear equations](#)

Time for Simon Says?

Simon says:

$y = |x|$

$y = x^2$

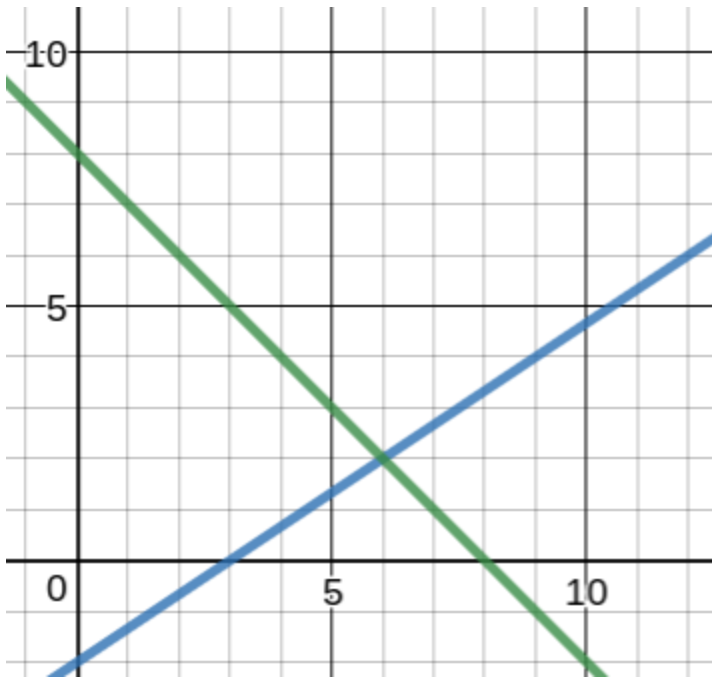
$y = |x - 2|$

$y = (x)^2 + 2$

$y = (x+2)^2$

$y = |2x|$

$y = 2x^2$



[HW 1 - Translating Statements](#) Due Sept 9

[HW 2- Order of Operations](#) Due Sept 10

[HW 3 - The Real Number System](#) Due Sept 12

[HW 4 - Properties and Solving Equations](#) Due Sept 13

[HW 5 - Solving Multi-step Equations](#) Due Sept 16

[HW 6 - Solving Equations with Variables on both sides](#) Due Sept 18

[HW 7 - Solving Rational Equations](#) Due Sept 19

[HW 8 - Word Problems](#) Due Sept 20

[HW 9 - Literal Equations](#) Due Sept 23

[HW 10 - Solving Literal Equations with factoring](#) Due Sept 24

Get ready for:

TEST

CCSS.MATH.CONTENT.HSF.BF.A.1

=Write a function that describes a relationship between two quantities.\*

=Construct and compare linear, quadratic, and exponential models and solve problems.

CCSS.MATH.CONTENT.HSG.GPE.A.2

-Derive the equation of a parabola given a focus and directrix.

≡Explain why the  $x$ -coordinates of the points where the graphs of the equations  $y = f(x)$  and  $y = g(x)$  intersect are the solutions of the equation  $f(x) = g(x)$ ; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where  $f(x)$  and/or  $g(x)$  are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.\*