Geometry **Sem 2 Review Calendar and Algebra Review**

Day	Date	**Assignment** (Due the next class meeting)	
Thursday **Friday**	**5/25/23 (A)** **5/26/23 (B)**	In class: Notes on Algebra Review **HW: Algebra Review Wk**	
Tuesday **Wednesday**	**5/30/23 (A)** **5/31/23 (B)**	In class: Start Sem 2 Rev Wk #1 **HW: Finish Sem 2 Rev Wk #1**	
Thursday **Friday**	**6/01/23 (A)** **6/02/23 (B)**	In class: Start Sem 2 Rev Wk #2 **HW: Finish Sem 2 Rev Wk #2**	
Monday	**6/05/23 (C Day)**	In class: Grade/Correct Sem 2 Rev Wk #2 **HW: make your Notes Page for the Final**	
Tuesday **Wednesday**	**6/06/23 (A)** **6/07/23 (B)**	In class: Start Practice Final **HW: Finish Practice Final**	
Thursday **Friday**	**6/08/23 (A)** **6/09/23 (B)**	In class: Correct Practice final; review day **HW: finish your Notes Page for the Final**	
FINAL Exams	**Monday 6/12/23** Per 1 (8:00 – 10:00 am) Per 4 (10:10 – 12:10 pm)	**Tuesday 6/13/23** Per 2 (8:00 – 10:00 am) Per 5 (10:10 – 12:10 pm)	**Wednesday 6/14/23** Per 3 (8:00 – 10:00 am) Per 6 (10:10 – 12:10 pm)

Notes:

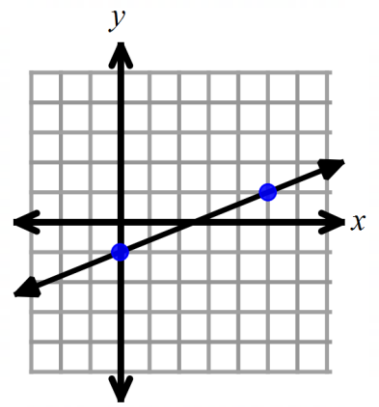
- Seniors in periods 2 and 3 will take their finals early (on Thurs 6/8/23)
- Seniors in periods 5 and 6 will take their finals early (on Friday 6/9/23)
- SENIORS… please talk to your teachers to get the review materials early.
- All worksheets and solutions are posted on the website: www.DRHSmath@washoeschools.net
- Students will get to use a student-created, hand-written Notes Page on the final
    - 1 full page, front and back

Algebra Review Notes

Objectives

- Graph lines in slope-intercept form
- Multiply binomials
- Factor trinomials
- Factor difference of perfect squares

Graphing Lines

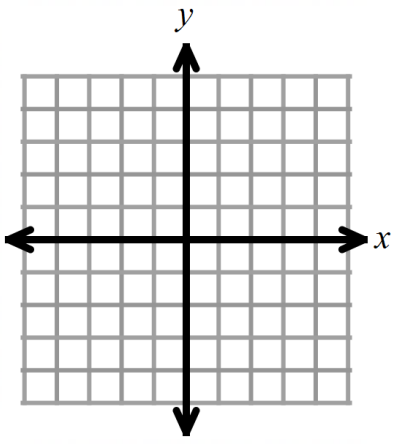
Slope of a Line	
***y*-intercept of a line**	
Slope-Intercept Form of a Line	$y = mx + b$
Graphing Lines in Slope-Intercept Form	1) **b**egin with the _____ (***b***) 2) **m**ove to a 2nd point by using the _____ (***m***)

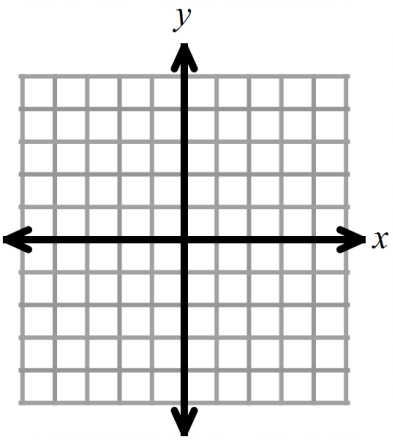
For #1 – 3: graph each line. Include at least two points.

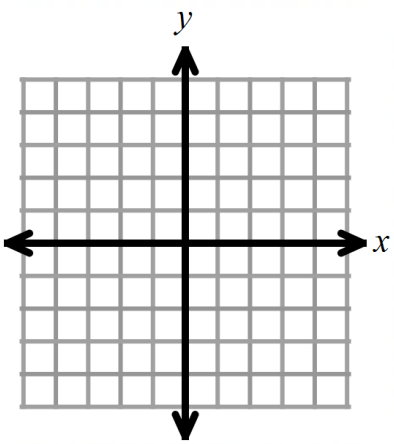
1) $y = \frac{3}{5}x - 2$

2) $y = -4x + 3$

3) $y = x$

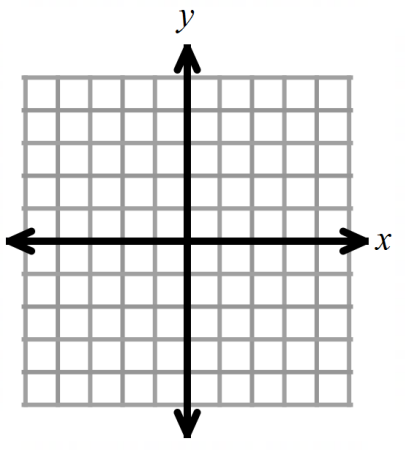


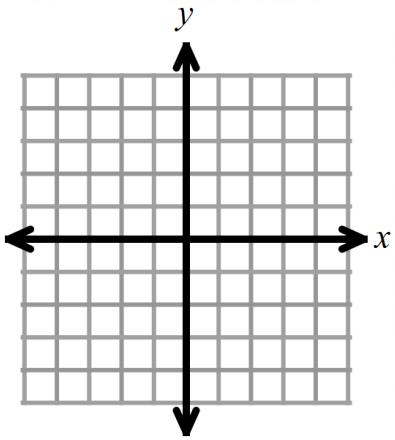


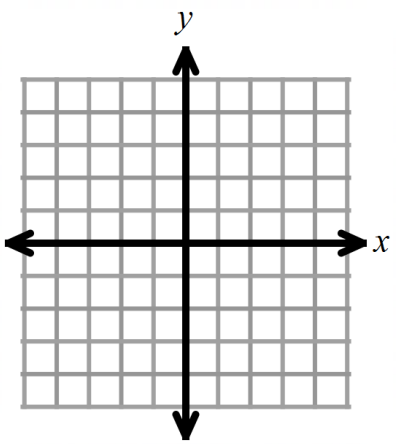


You Try! Graph #4 – 6 on the coordinate systems provided below.

4) $y = 2x - 4$ 5) $y = -\frac{3}{2}x + 1$ 6) $y = x - 2$







Multiplying Binomials

Binomial	
Multiplying Binomials	$(a + b)(c + d)$ 1) Distribute the **first term** into the **2nd binomial.** 2) Distribute the **2nd term** into the **2nd binomial.** 3) Combine like terms.
FOIL	

For #7 – 9, multiply the binomials. (Challenge… try to do these in your head!)

7) $(x + 3)(x - 2)$ 8) $(a + 2)(a + 5)$ 9) $(b - 4)(b + 4)$

You Try! For #10 – 12, multiply the binomials. (Challenge… try to do these in your head!)

10) $(d+8)(d-2)$ 11) $(y+7)(y+3)$ 12) $(h+5)(h-5)$

Factoring Trinomials

Trinomial	
Factoring Trinomials in the form $x^2 + bx + c$.	$x^2 + bx + c$ 1) Find two **factors of *c*** that have a **sum of *b***. 2) Use the factors to write two binomials that are multiplied. 3) Check by multiplying the binomials. ___ + ___ = ***b*** ____ · ____ = ***c***

For #13 – 15, factor each trinomial.

13) $x^2 + 10x + 16$ 14) $x^2 + 2x - 15$ 15) $x^2 - 9x + 18$

You try! Factor #16 – 18.

16) $x^2 - 3x - 10$ 17) $x^2 - 13x + 22$ 18) $x^2 + 6x + 5$

Factoring Difference of Perfect Squares

Difference of Perfect Squares	
Factoring Difference of Perfect Squares	$a^2 - b^2$ 1) Find the square root of each term (a and b) 2) Create two binomials (one with the sum of the square roots, and one with the difference of the square roots.) $(a + b)(a - b)$ 3) Check by multiplying the binomials.

For #19 – 21, factor each expression.

19) $y^2 - 4$ 20) $a^2 - 49$ 21) $81 - h^2$

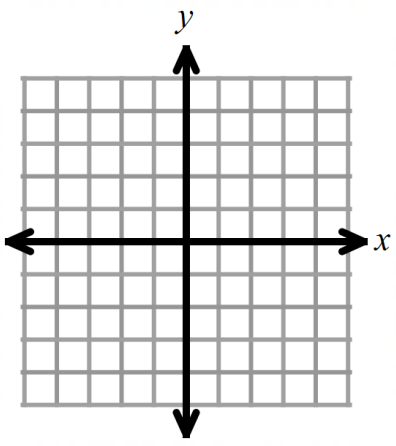
You try! Factor #22 – 24.

22) $b^2 - 36$ 23) $100 - d^2$ 24) $x^2 - 1$

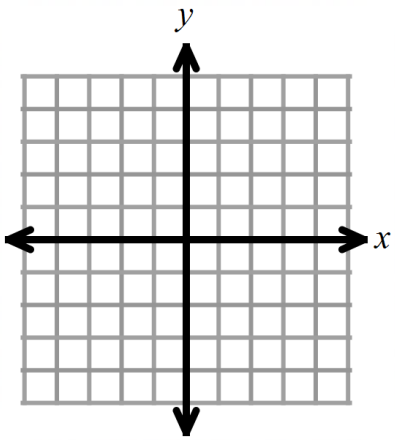
Algebra Review Worksheet **Name**_____

For #1 – 6, graph each line on the provided coordinate system.

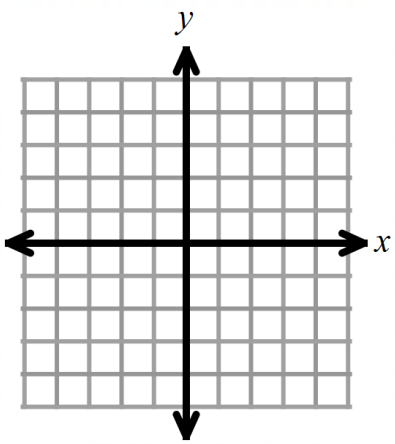
1) $y = \frac{5}{2}x - 3$



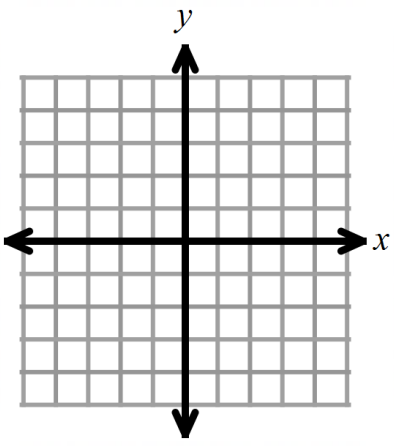
2) $y = x + 2$



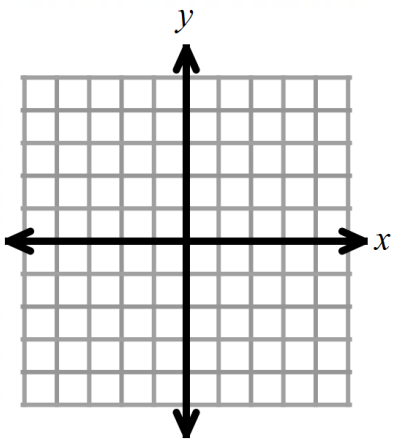
3) $y = -3x + 4$



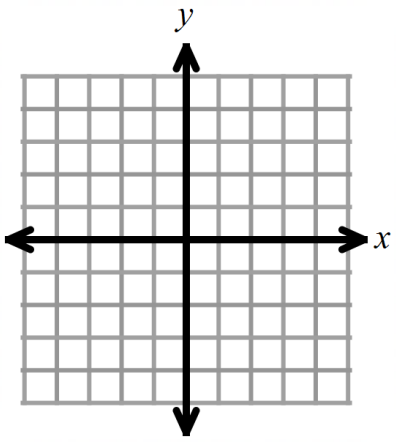
4) $y = -\frac{1}{4}x + 1$



5) $y = \frac{2}{3}x$



6) $y = -x$



For #7 – 9, factor each trinomial.

7) $x^2 + 8x - 20$

8) $x^2 - 2x - 24$

9) $x^2 + 7x + 12$

Algebra Review Worksheet continued on the next page…

Algebra Review Worksheet, continued…

For #10 – 21, factor each expression.

10) $x^2 - 121$

11) $25 - w^2$

12) $b^2 - 144$

13) $x^2 + x - 6$

14) $x^2 - 9$

15) $x^2 + 15x + 50$

16) $64 - m^2$

17) $x^2 - 3x - 28$

18) $1 - x^2$

19) $a^2 - 100$

20) $x^2 + 7x - 18$

21) $x^2 - 4x + 3$