Algebra/Geo Review

NAME_____**ID#**_____**PER**_____**GRADE LEVEL (circle one): 9 10 11 12**

CURRENT MATH COURSE _____ **CURRENT MATH TEACHER JAUREGUI**

MATH HISTORY – Fill in information for EACH Math Course

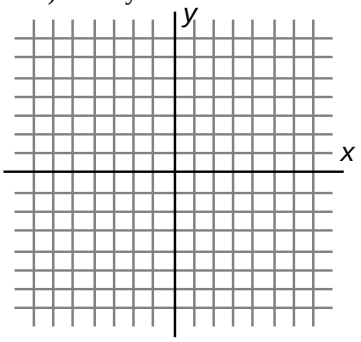
Write **DNT** – if course was not taken.

MATH COURSE **Choose one of the following:**	**FINAL LETTER GRADE RECEIVED**	**MATH TEACHER** (who taught this course)
o **Geometry Honors**		
o **Geometry Hn/Gifted**		
o **Algebra 2 Honors**		
o **Algebra 2 Hn./Gifted**		
o **College ALG/MFL**		

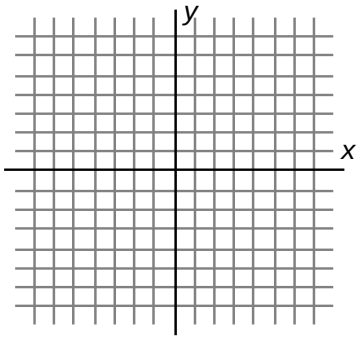
SHOW ALL WORK NEXT TO THE PROBLEM:

I. GRAPH THE FOLLOWING LINEAR EQUATIONS. Use a ruler and plot and label three points.

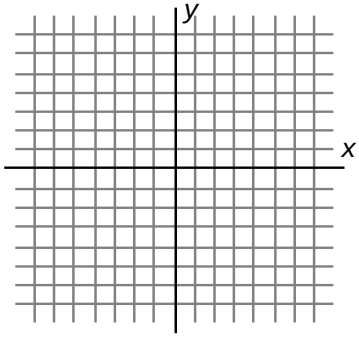
1) x + y = 5



2) y = 3



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



II. SIMPLIFY:

4) $(3x^2 y^3)(5xy^2)$

5) $\frac{10x^2 y}{2xy^2}$

6) $7x - (8 - 3x)$

7) $(2x - 3y)(5x + 5y$

III. SOLVE THE FOLLOWING EQUATIONS:

8) $6x + 4(3 - x) = 30$

9) $13 - (2c + 2) = 2(c + 2) + 3c$

10) $\frac{1}{4}(8y+4) - 17 = (-\frac{1}{2})(4y-8)$

IV. SOLVE THE FOLLOWING INEQUALITY:

11) $-2x + 13 < 21$

4)
5)
6)
7)
8) x =
9) c =
10) y =
11)

V. FACTOR COMPLETELY:

12) $x^2 - 25$ 13) $6y^2 - 4xy$ 14) $x^2 + 9x + 20$

VI. SOLVE THE FOLLOWING QUADRATIC EQUATIONS: [DO NOT USE QF]

15) $x^2 - 6x + 8 = 0$ 16) $4x^2 - 6x = 0$

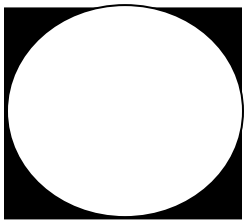
VII. SIMPLIFY. LEAVE ANSWERS IN SIMPLEST RADICAL FORM:

17) $\sqrt{98}$ 18) $\sqrt{45}-\sqrt{20}$ 19) $(\sqrt{3x^2})(\sqrt{9x^3})$

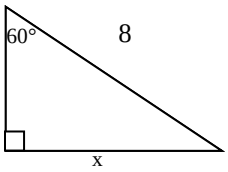
20) $9\sqrt{y}+3\sqrt{y}$ 21) $\sqrt{x^6}$

VIII. GEOMETRY:

22) Find the area of the shaded region:
(Circle with radius = 6 cm.
inscribed in a square).
Leave the answer in terms of π.



23) Solve for x:



24) Solve the following system of linear equations:

$$\begin{cases} x+y=2 \\ -3x+4y=36 \end{cases}$$

25) Find an equation of the line containing the points A(5,3) and B (2,- 4). Write your answer in slope intercept form (y = mx + b).

12)
13)
14)
15)
16)
17)
18)
19)
20)
21)
22)
23)
24)
25)