Ws Summer Practice for Rising Honors Algebra 2 Students Name _____

This packet will ask you to practice how to factor and graph. These are extremely important skills to be successful in Algebra 2. Complete all problems without a Calculator. Watch videos on the internet if you need help remembering how to do something.

Factor.

1. $\left(12x^3+12x^2\right)$

2. $\left(-9x-12\right)$

3. $\left(24x^2-6x\right)$

4. $\left(18x^3y^5-24x^4y^3+12x^2y^4\right)$

5. $x^2-7x-19$

6. $3x^2+24x+36$

7. $6x^2-27x+27$

8. $2x^2-7x-30$

9. y^2-49

10. $4x^2-4x-35$

11. $6m^2-22m-8$

12. $3a^2-75$

13. $2x^2+xy-3y^2$

14. $81-b^2$

15. $14-9x+x^2$

16. $6w^2+19w-20$

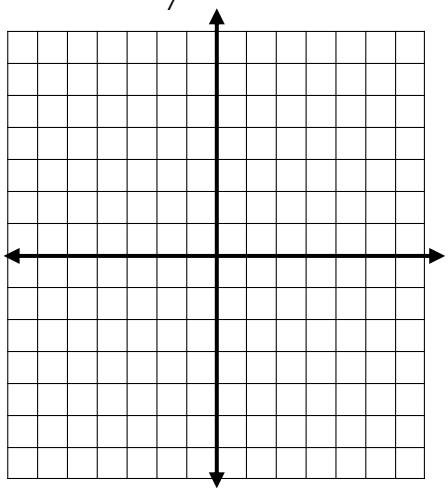
17. $2x^2-60x+450$

18. $81x^2-36x+4$

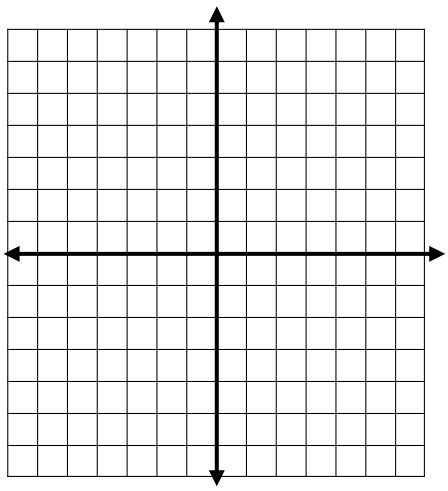
19. $100w^2-361$

Graph. Show all work. You should not need a calculator.

20. $f(x) = -\frac{3}{7}x + 4$



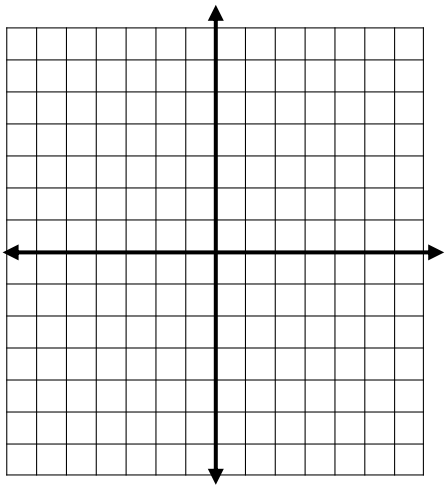
21. $2x - 3y = -12$



22. $y = -3|x-2| + 4$

Fill in the table. **Show work** for finding the points

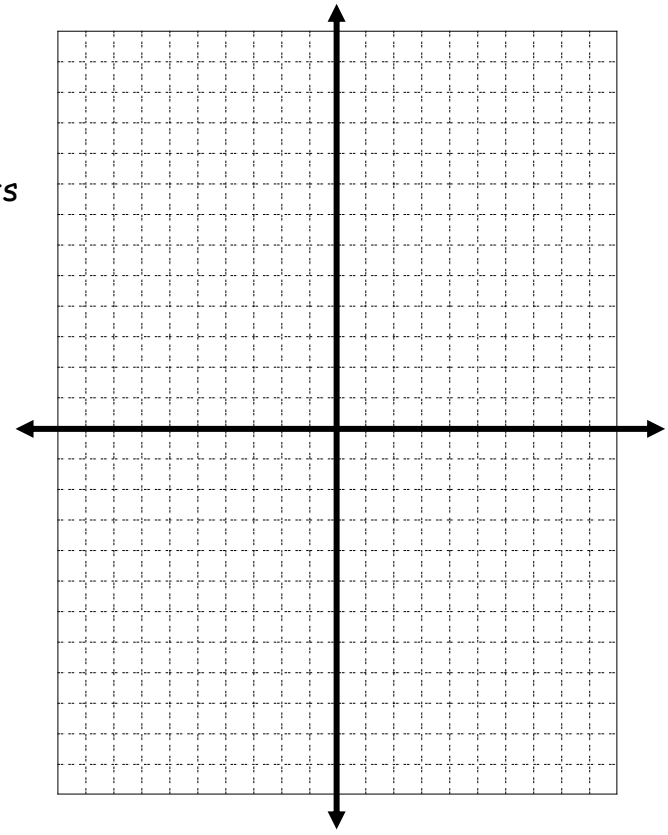
X	Y



23. $f(x) = -x^2 - 2x + 8$

Fill in the table. **Show work** for finding the points

X	Y



Honors ALGEBRA 2 READINESS QUIZ **Name: _____**

Now quiz yourself…are you ready for Honors Algebra 2?
<u>Show all work!</u> **<u>NO Calculator</u>**

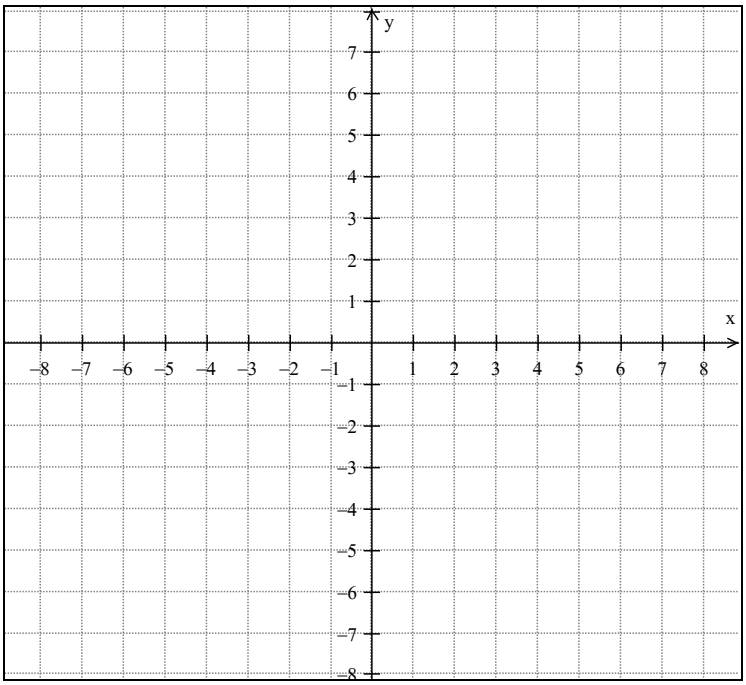
Solve for *x*.

1. $\frac{5}{7}x+1=\frac{5}{6}x+\frac{1}{2}$	2. $\frac{2}{3}(6x+9)-4=3-(2x-7)$

Factor the polynomial completely.

3. $3x^2y-27xy^2$	4. $12x^2-7x-10$
5. $25x^2-81$	

Graph the line $3x-4y=20$



6. Write the equation of the line in *Point-Slope Form, Slope-Intercept Form, and Standard Form* given two points.

$(2,-2),(-1,4)$

Point-Slope Form: _____

Slope-Intercept Form: _____

Standard Form: _____

7. Subtract the fractions.

$\frac{11}{8}-\frac{7}{5}$