Pick Up A
HW Recording Sheet

Starting today you will evaluate your HW using the Rubric.

After going over questions in class, write your score, in ink, on
(a) Your paper
(b) The Recording Sheet.

period ___ first/last name _____

Algebra 2 - HW Recording Sheet ------ Chapter 1

- ✓ When you arrive in class, your name should already be in on the top of your paper, in ink. The assignment and your period should also be written down.
- ✓ Once class starts, you can only add to your homework in ink (in a color that stands out from your main work.)
- ✓ Before the conclusion of HW checking, your score must be written in INK in two places:
  1) In the upper right hand corner on your actual HW.
  2) and below in the *HW Proficiency* column below. (*Write "0" if you did not do your HW).*
- ✓ This sheet and all completed assignments for a chapter must be brought to class every day and kept next to this sheet. If a random HW Quality check is done and this sheet is not in class, then the assumption is that you have not done any assignments up to that point.

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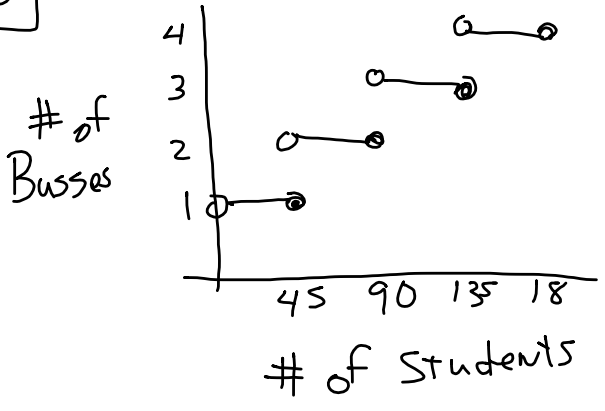
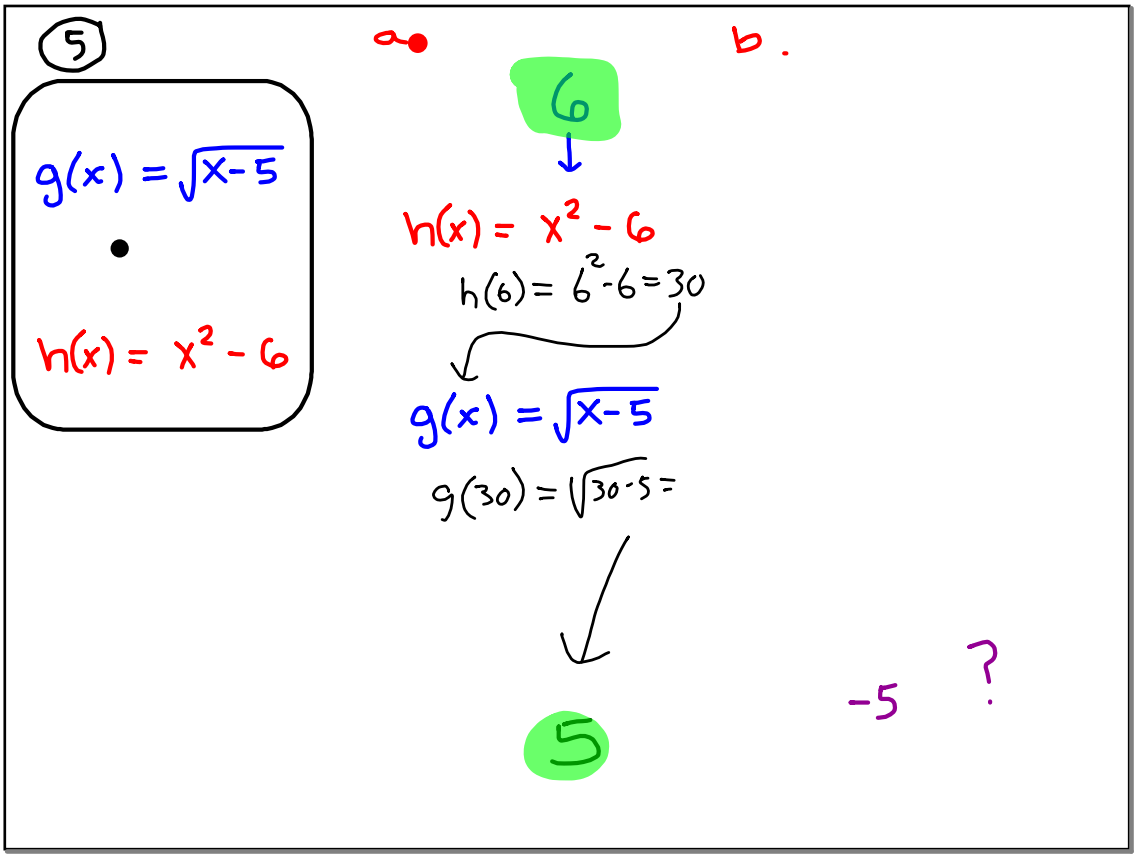
Day (Mon, Tu, etc)	Date Assigned	HW Description Reminder: If you are absent, you are required to check the class website for details before you return.	HW Proficiency Score from 0 to 10	Explain Special situations "absent on ___"
T	12/4	Assign #1 (WS) Blue	8	
W	12/5	[1] 4, 7ad, 8, 18, 21		
	/			

Questions on the HW ?

1-6





1. $y = x^2$

- **1-8.** The graph for part (d) of problem 1-7 is different from the other three graphs. Homework Help

1. Explain how the graph is different from the other three graphs.
2. What in the equation of part (d) makes its graph different?
3. What is the graph of part (d) called?

(8)

1. When you graph an equation such as $y = 3x - 5$, which variable (the x or the y) *depends* on the other? Which is not dependent? (That is, which is *in*dependent?) Explain.

2. Which variable is *dependent*: temperature or time of day? Which variable is *independent*?

3. Sketch a graph (with appropriately named axes) that shows the relationship between temperature outside and time of day.

21 d $f(x) = -\frac{2}{3}x + 3$ $g(x) = 2x^2 - 5$

(a) $f(3) = -\frac{2}{3}(3) + 3 = 1$

(d) Solve $g(x) = -7$

$-7 = 2x^2 - 5$

$+5 \quad +5$

$-2 = 2x^2$

$-1 = x^2$

$\sqrt{\quad} \quad \sqrt{\quad}$

$= x$

7d) $y = x^2$

x	y
-1	1
-2	4
0	0
1	1

7acd

~~7a-d~~

9 or 10

Completed on time, before class starts.

Required Qualities

A. **The "starting" expression** or information is written down before you work on a problem. *(unless the problem is lengthy or in paragraph form. Ideally you should skip a line before the next problem.*

B. **Appropriate, detailed steps, are shown in all problems** (when there is a process).

C. **Good notation** is used.
D. **Work is neat and organized.**
E. You skip a line before the next problem.

Note: *Not all answers have to be correct to get this score but it is obvious, when looking at your paper as class starts, that your paper generally has all of the qualities above.*

Note: *Not all answers have to be correct to get this score but it is obvious, when looking at your paper as class starts, that your paper generally has all of the qualities above.*

Note: *You can still get this score if you have a question you need help with (maybe two) provided you use the HW Tally and all problems have the same qualities listed above once HW time is finished.*

n

7 or 8

Completed on time, before class starts and about...

80% of the assigned work is done with the required qualities

Remember to keep all completed HW assignments near your recording sheet and always have them in class.

/	
/	Mid ch. check
/	

If absent from my class:

1. **Always check my blog for details, etc**
2. **Always check the Class Papers Basket for...**
3. **Ask for the solutions to the previously scored assignment so you can check your work, etc.**

Goals Today

① Use the ZERO PRODUCT PROPERTY (ZPP)

② Use Graphing Calculators to analyze functions and make "complete" Graphs.

Product of factors

do we know anything about the factors ?

$3 \cdot 7 = 21$

$2 \cdot b = 10$

$a \cdot b = 24$

$n \cdot m \cdot x = 0$

$a \cdot b = 0$

if $a \cdot b = 0$
then $a = 0$ or $b = 0$

3 Examples

Solve each quadratic equation using the zero product property

a) $(3x-4)(2x-5) = 0$

$a \cdot b = 0$

Use ZPP

$3x - 4 = 0$ $\quad$ $2x - 5 = 0$

$3x = 4$ $\quad$ $2x = 5$

$x = \frac{4}{3}$ $\quad$ $x = \frac{5}{2}$

b) $n^2 + 8n = 0$ NO FACTORS, Yet

common? n

$n(n+8) = 0$

ZPP

$n = 0$ $n+8=0$

$n=0$ $n=-8$

c)

zero product property

$4x^2 - 11x - 3 = 0$

$(4x+1)(x-3) = 0$

ZPP

$4x+1=0$ $x-3=0$

$4x=-1$

$x=-\frac{1}{4}$ $x=3$

	$4x$	
x	$4x^2$	x
-3	$-12x$	-3

$-12x^2$ $-11x$

$-12x$ x
$12x$ $-x$
$6x$ $-2x$
$-6x$ $2x$
$4x$ $-3x$
$-4x$ $3x$

$(4x+1)(x-3) = 0$

B.B.

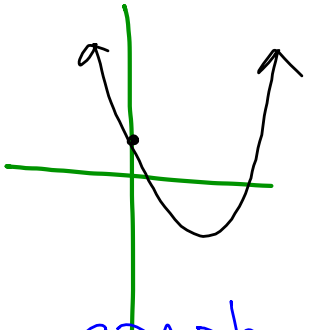
In Algebra 1 you learned about the multiple representations of functions:

0	1
-1	4
1	0
2	3

TABLE

$y = x^2 - 2x + 1$

EQUATION



GRAPH

+ Situations

TODAY'S AIM:

Use graphing calculators

to

- make "Complete Graphs"
- Analyze functions

- have one person get a GDC for each person in your group.
- the same person will return all of them.

FORMAT

Home Screen

5^2

7^3

$(8^3 - 7^2)^3$

$-(-3)^2 + 7(4) - 3$

$\sqrt{4900}$

$\sqrt[3]{125}$

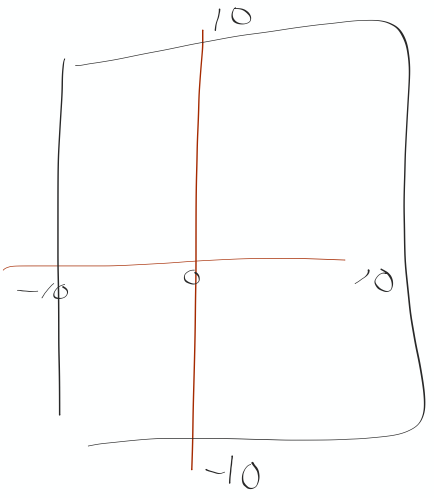
Y =

$y = 3x + 2$

$y - 2x^2 + 3x + 1$

When finished

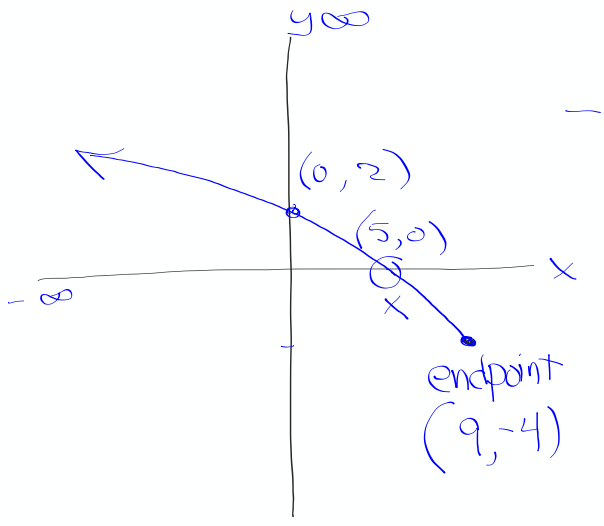
- ✓ clear Y =
- ✓ turn off



In your Notes

will need a half piece of graph paper

$$y = 2\sqrt{9-x} - 4$$



domain

$-\infty < x \leq 9$

range

$-4 \leq y < \infty$

1. What are the locations of key points ?

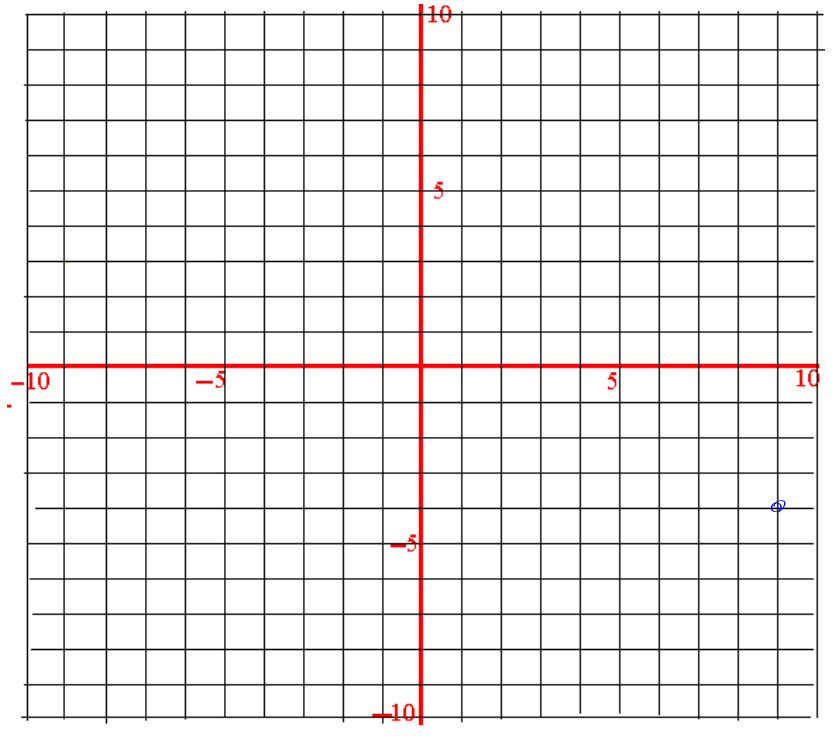
2. What is the domain ?

3 Is there a maximum or minimum y-value ?
If so, what is it?

4. Can we identify **5** integer inputs and their outputs ? (five graphing friendly points)

Make a Complete on Graph Paper

- Plot points accurately
- Scale axis appropriately
- Label key points



☆☆ Rows	Pods of 3 to 4	**Strong** preference for **rows**
☆ Rows	Pods of 3 to 4	Slight preference for **rows**
Rows	Pods of 3 to 4	I'm flexible
Rows	☆ Pods of 3 to 4	Slight preference for **pods**
Rows	☆☆ Pods of 3 to 4	**Strong** preference for **pods**

If your group is selected, everyone must contribute to the presentation in some way.

Including at least one statement starting with

"At first we were confused by..."

"This makes sense because..."

"We weren't sure about..., so we tried..."

"Something interesting that we noticed about our graph is..."

1- 13bdf, 15-17, 20, 25

If you want a challenge, you can do #22 instead of #25

if you were absent yesterday,

please see me about a short

Pre-test we took yesterday

Avoid the cycle of destruction.

If you are struggling with the work, don't leave school that day unless you get help or come in early the next day.