

●  
Everyday when you arrive I want you to do two things:

1. Before starting the warm up, please let me know about any homework problem in which you had trouble with by filling out the **HW TALLY** on the side board. (or just get help within your group)
2. Then start the warm up (if any).....

Warm up

- is a handout

$$y = mx + b$$

- Pick it up at the front table.

1. \_\_\_\_  $x \cdot x^2 \cdot x^4 =$  \_\_\_\_\_
2. \_\_\_\_  $x \cdot x \cdot x^2 =$  \_\_\_\_\_
3. \_\_\_\_  $(3x)(4x) =$  \_\_\_\_\_
4. \_\_\_\_  $(3x)(-4x) =$  \_\_\_\_\_
5. \_\_\_\_  $(3x^2)(6x^2) =$  \_\_\_\_\_
6. \_\_\_\_  $(-2x)(-9x^3) =$  \_\_\_\_\_
7. \_\_\_\_  $(12x)(3x^2y^2) =$  \_\_\_\_\_
8. \_\_\_\_  $(6x)(\frac{1}{6}x^3) =$   $x^4$
9. \_\_\_\_  $(3xy)(2xy) =$  \_\_\_\_\_
10. \_\_\_\_  $(-\frac{3}{5}x)(15xy) =$   $-9x^2y$
11. \_\_\_\_  $(2x)(-3x)(-6y^2) =$   $36x^2y^2$

$$\left(-\frac{3}{5}x\right)\left(15xy\right)$$

$$-\frac{3}{5} \cdot x \cdot 15 \cdot x \cdot y$$

$$-\frac{3}{\cancel{5}} \cdot \cancel{15}^3 \cdot x^1 \cdot x^1 \cdot y$$

$$-9x^2y$$


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$$\cancel{6}^1 \cdot \frac{1}{\cancel{6}^1} \cdot x^1 \cdot x^3$$

Answer Bank				
L. $18x^4$	N. $-2x^4y^2$	E. $18x^2y^6$	T. $36x^2y^2$	V. $x^2y^2$
A. $-12x^2$	G. $x^2y^3$	P. $36x^3y^2$	R. $12x^2$	
F. $x^7$	O. $x^4$	S. $6x^2y^2$	I. $-9x^2y$	

12. \_\_\_\_  $(-3x^2)(3y) =$  \_\_\_\_\_
13. \_\_\_\_  $(-xy)(-xy) =$  \_\_\_\_\_
14. \_\_\_\_  $(-3xy)(-6xy^5) =$  \_\_\_\_\_
15. \_\_\_\_  $(9)(-x^2y) =$  \_\_\_\_\_
16. \_\_\_\_  $(-\frac{1}{3}x^2y)(3x^2y)(2) =$   $-2x^4y^2$
17. \_\_\_\_  $(-3x^2)(-3)(4y^2) =$  \_\_\_\_\_
18. \_\_\_\_  $(-2x)(-9)(xy^6) =$  \_\_\_\_\_
19. \_\_\_\_  $(-xy)(-xy^2) =$  \_\_\_\_\_
20. \_\_\_\_  $(\frac{2}{3})(9x^2)(3y^6) =$  \_\_\_\_\_
21. \_\_\_\_  $(2x)(2x)(3) =$  \_\_\_\_\_
22. \_\_\_\_  $(\frac{1}{2}x)(6x)(2y^2) =$  \_\_\_\_\_

$$\left(\frac{2}{3}\right)\left(9x^2\right)\left(3y^6\right)$$

## If absent from my class:

1. Before you get back, 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.

Don't

$$\frac{\frac{2}{3}n}{\frac{2}{3}} = \frac{6}{\frac{2}{3}}$$

Yes <sup>o</sup>

$$\cancel{\frac{2}{3}}n = 6(3)$$

$$2n = 18$$

$$\frac{\frac{2}{3}n}{\frac{2}{3}} = \frac{6}{\frac{2}{3}} + \frac{1}{\frac{2}{3}}$$

$$-3x + 2 = 5x + 7$$

$+3x$                        $+3x$

$$\frac{2}{-7} = 8x + \frac{7}{-7}$$

$$\frac{-5}{8} = \frac{8x}{8} \quad \frac{2}{8}$$

$$\frac{-5}{8} = x$$

$$x = \frac{-5}{8}$$

Equations with the unknown on both sides.

An equation is like a set of scales. To keep it balanced, whatever you do to one side you must do to the other.

$$3(2) - 3x(3) = x(3) + \frac{2(3)}{3}$$

$$2 - 3x = x + \frac{2}{3}$$

$$6 - 9x = 3x + 2$$

$+9x$                        $+9x$

$$\frac{6}{-2} = 12x + \frac{2}{-2}$$

$$4 = 12x$$

divide by 12

$$x = \frac{4}{12} \left( \frac{1}{3} \right)$$

$$3(30) \cdot 3 = \frac{180(x+1)}{31}$$

$$9 = 10(x+1)$$

$$9 = 10x + 10$$

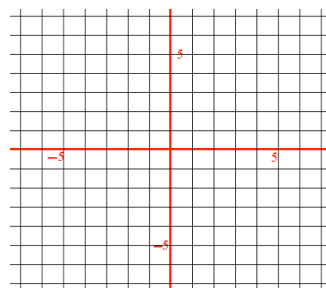
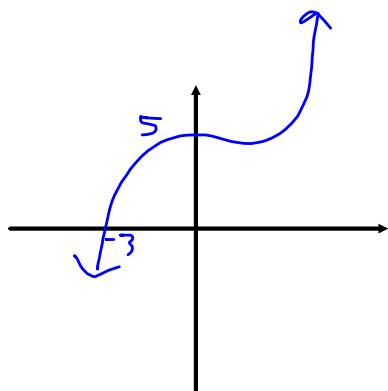
$$-1 = 10x$$

$$x = -\frac{1}{10}$$

**Algebra 2** is about studying many types of functions because there are so many different types of behavior in the world.

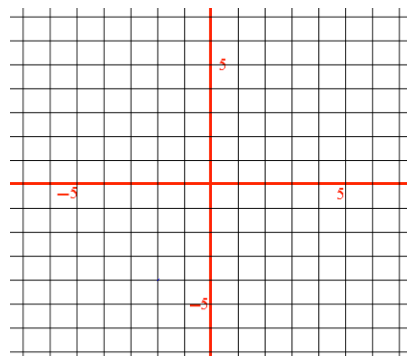
Occasionally you'll be asked to either sketch a picture or graph a function.

There is a big difference between a **sketch** and a **graph**



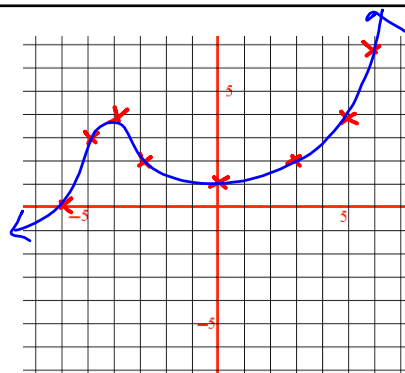
# Graphs

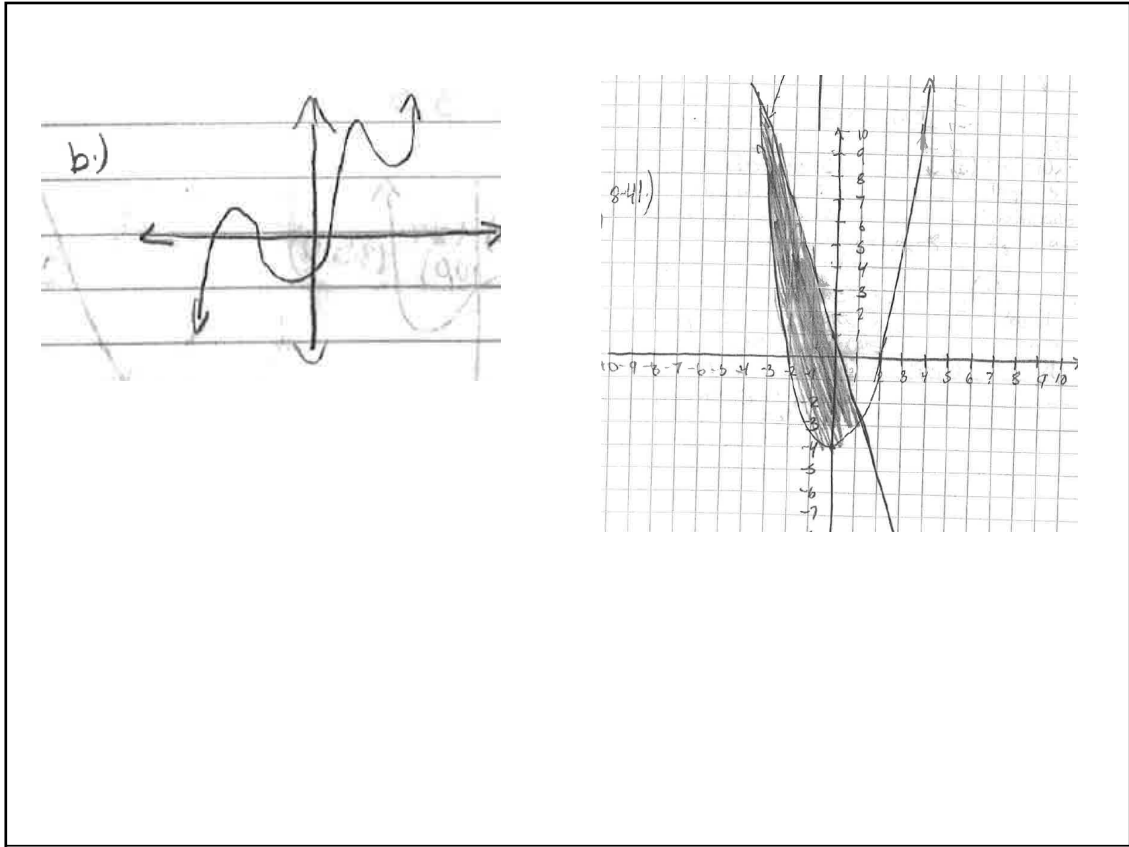
- Plot points accurately
- Graph Paper
- Don't make tiny
- label key points



## Graphs

- Plot points accurately
- Graph Paper
- Don't make tiny
- label key points





## Syllabus - Part 2

From Yesterday - <sup>Any</sup> Questions on  
Supplies ???  
or anything else



## Partner Warm Up

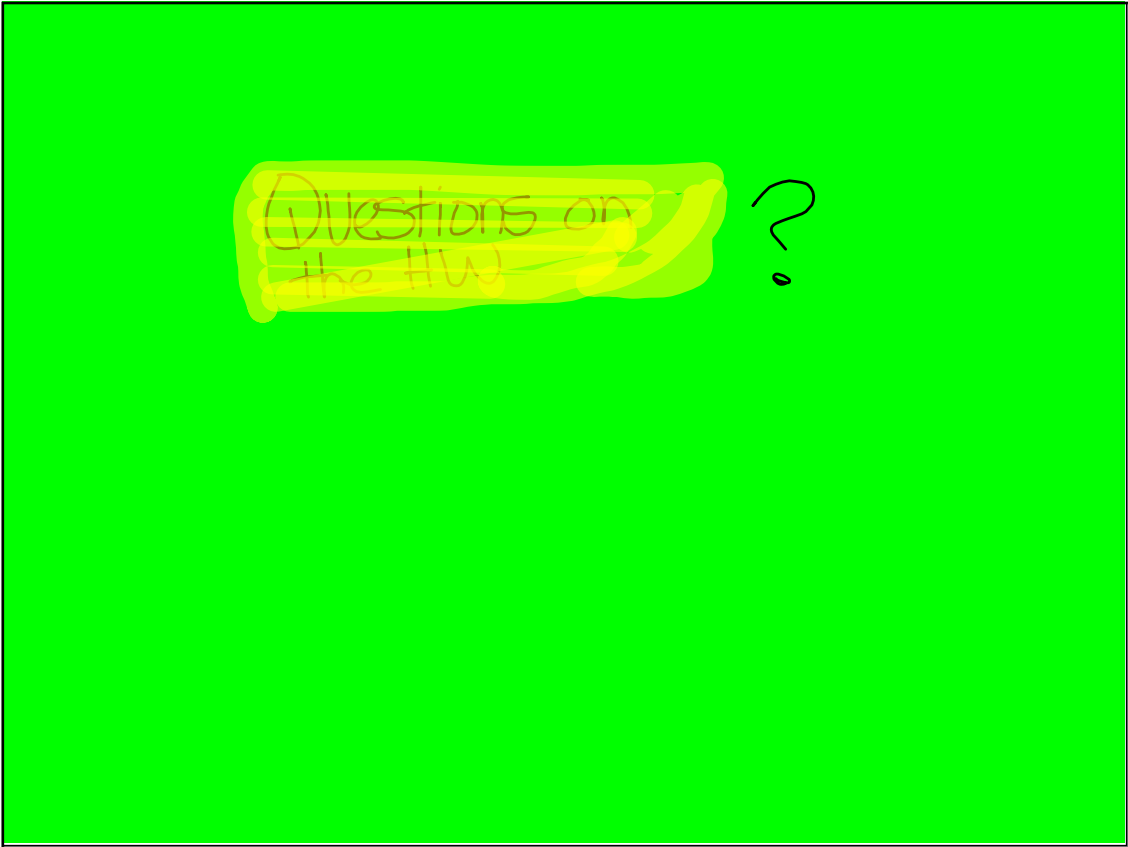
Pull out your syllabus.

Look at sheet two on **Grading Framework**

Put Syllabus

away .

we'll look at <sup>the very</sup> last sheet  
tomorrow.



**Assignment #1** **Key**  
**Algebra 2A**

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Name: \_\_\_\_\_ ↙ Always first and last  
 Period: \_\_\_\_\_

1. The carnival charges \$15 for admissions and \$2 per ride. ( $x$  = number of rides,  $y$  = cost)

Write an equation for the situation.

$y = 15 + 2x$  or  $y = 2x + 15$

Fill in the table.

$x$	$y$
0	15
1	17
2	19
3	21

4. Which of the following expressions are equivalent to 10  
 Circle yes or no.

$(-8) + 6(8 - 5)$  yes / no  
 $10$

$3 + 6(5 + 4) + 3 - 7$  no

$3 + 54 \div 3 - 7$   
 $3 + 18 - 7 = 14$

$(-4)(-3) + 6 - 2[5 - (-8) + (6 + 2)]$  no

$12 \div 6 - 2[13 + 3]$   
 $= 2 - 2[16]$   
 $= 2 - 32 = -30$

2. Which equations are equivalent to  $10 = 4x$ ? Circle yes or no.

a.  $8x = 20$   yes / no

b.  $12 = 4x + 2$   yes / no

c.  $12 = 6x$  yes /  no

5. Solve for x

$$\begin{array}{r} 3x + 4 = 10 \\ -3 \quad -3 \\ \hline 3x = 6 \end{array}$$

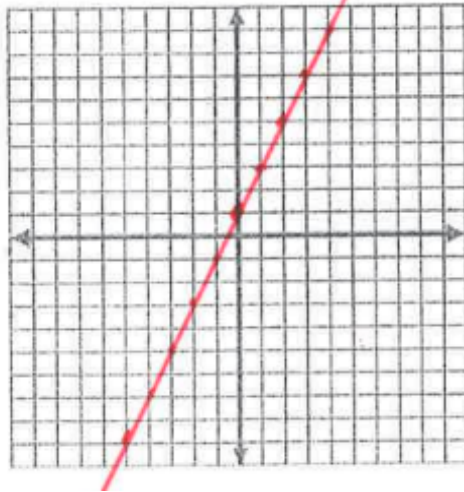
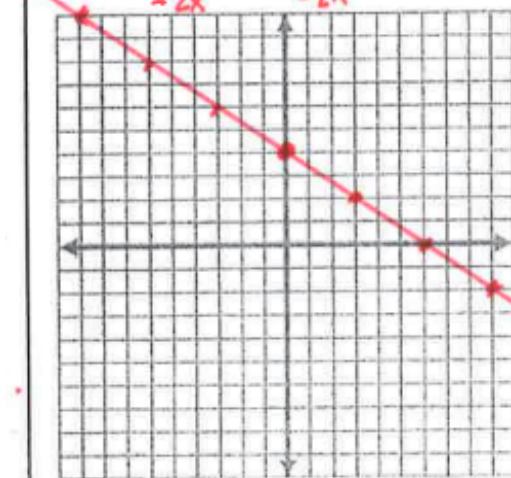
$$x = 2$$

$$\begin{array}{r} 2 + \frac{1}{2}x = 4 \\ -2 \quad -2 \end{array}$$

$$\frac{1}{2}x = 2$$

multiply by 2

$$x = 4$$

3. Graph:  $y = 2x + 1$ slope is  
2 or  $\frac{2}{1}$ should be  
using a  
ruler!6. Graph:  $2x + 3y = 12$ 

solve for y

$$3y = -2x + 12$$

$$y = -\frac{2}{3}x + 4$$

↑  
y-int.

7. The admission for the class to go to Michigan's Adventure is \$24 per person. The cost of the busses for the entire 9th grade will be \$450.

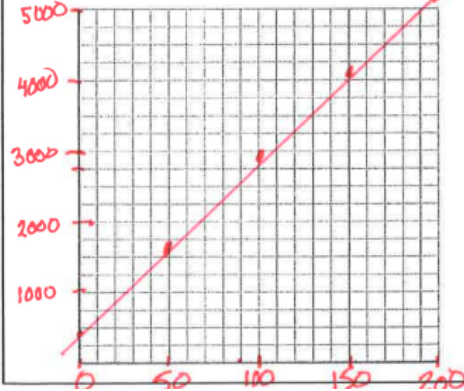
a. Write an equation or rule that represents the function.

$y = 450 + 24x$  or  $y = 24x + 450$

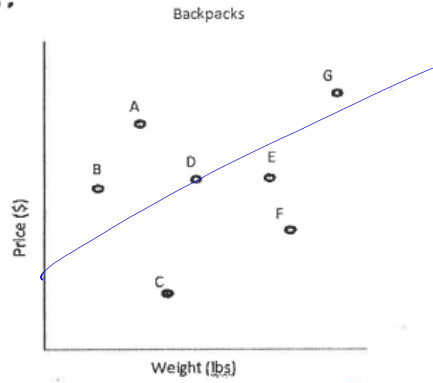
b. Make a table that show how much a trip will cost for 50 students, 100 students, 150 students, and 200 students.

Students	50	100	150	200
Cost (\$)	1650	2850	4050	5250

c. Graph.



8.



a. Which point shows the heaviest bag? G

b. Which point shows the cheapest bag? C

c. Which bag is the best value? F? C?

Why? Low Price to weight ratio

today ( but no later than tomorrow)

give yourself a completion score out of 10 on last night's HW.

10 (A)

*Your homework grade will consist of two components:*

*A self reported HW Proficiency grade (using the rubric below) recorded on the other side of this sheet AND*

*a random homework quality grade given by Mr. Cedarlund.*

**Starting tomorrow:**

Evaluate your HW  
using the HW Proficiency Rubric

Correcting

VS

Checking For Learning

# How to evaluate and score your HW.

## Homework Proficiency Rubric

## Homework recording sheet

period \_\_\_\_ first/last name \_\_\_\_\_  
**Algebra 2 - HW Recording Sheet ----- for 1**

- ✓ When you arrive in class, your name should already be in ink 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 everyday 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.

Day (Mon, Tu, etc)	Date Assigned	● <b>HW Description</b>	HW Proficiency Score from 0 to 10	Explain Special situations "absent on ____"
W	9/6	Assign. #1 (WS)		
Th	9/7			

Reminder: If you are absent, you are required to check the class website for details before you return.

<p><b>9 or 10</b></p> <p>Completed on time, before class starts.</p> <p><b><u>Required Qualities</u></b></p> <p>A. The "starting" expression or information is written down before you work on a problem. <i>(unless the problem is lengthy or in paragraph form. Ideally you should skip a line before the next problem.</i></p> <p>B. Appropriate, detailed steps, are shown in all problems (when there is a process). In general you should skip a line after your work, before starting the next problem.</p> <p>C. Good notation is used.</p> <p>D. Work is neat and organized.</p> <p>E. You skip a line before the next problem.</p> <p><i>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.</i></p> <p><i>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</i></p>	
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<p><b>7 or 8</b></p> <p>Completed on time, before class starts and about...</p> <p><b>80%</b> of the assigned work is done with the required qualities</p>	<p><b>5 or 6</b></p> <p>Completed on time, before class starts and about...</p> <p><b>60%</b> of the assigned work is done with the required qualities</p>
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<b>3 or 4</b>	<b>1 or 2</b>
Completed on time, before class starts and about...	Completed on time, before class starts and about...
40% of the assigned work is done with the required qualities	20% of the assigned work is done with the required qualities

<b>0</b>
If the assignment is not completed, the write "0" on the recording sheet at the time of checking.
BUT you eventually do it before the end of the chapter, then subtract 4 from what would have been your HW score. Write this reduced score <u>adjacent to the "0"</u> . Cross out the "0" recorded earlier but not erase the "0".
You may do this on one assignment per unit/chapter

# Homework Help - Demo

## Daily Assignments

Algebra 2A Assignments  
Algebra 2B Assignments  
IB-Math Studies Assignments  
Uncategorized

## Course Information

Welcome

About Mr. Cedarlund  
Contact Me  
ALGEBRA 2 Information  
IB-Math Class/Project Information  
IB Studies Exam Prep Resources  
Mock Exams  
Algebra 1 Information  
Check Your Grade  
FST Information

Laptop  
or  
Smart Phone

## ALGEBRA 2 Information

Link for : [CPM HW Help \(for Core Connections Algebra 2\)](#)

### Extra Practice for Each Chapter

Ch 1 Extra Practice

Ch 2 Extra Practice

Ch 3 Extra Practice

Ch 4 Extra Practice

Ch 5 Extra Practice

Ch 6 Extra Practice

Ch 7 Extra Practice

Ch 8 Extra Practice

Link for : [CPM TI-84 Graphing Calculator Instructions](#)



Goal for the remainder of class:

take  
notes

## Review factoring

$$12 \rightarrow 6 \cdot 2$$

$$2x + 10 \rightarrow 2(x + 5)$$

$$6m^3 - 3m \rightarrow 3m(2m^2 - 1)$$

# factoring quadratic trinomials

there are a few methods, one of which is guess and check

I would like you to be able to use the "Box/Diamond" method.

$$n^2 + 2n - 3$$

↓

$$(\cancel{n} - 3)(\cancel{n} + 1)$$

$$(n + 3)(n - 1)$$

$$\begin{array}{r} 3n \\ -n \end{array}$$

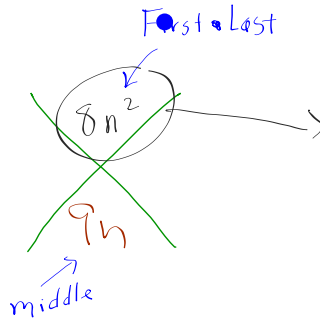
Easy

Any method  
works

$$2n^2 + 9n + 4$$

$$(2n+1)(n+4)$$

	$2n$	$1$
$n$	First $2n^2$	$n$
$4$	$8n$	LAST $4$



possibilities

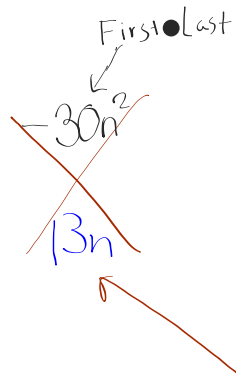
$$\begin{matrix} 8n \cdot n \\ 4n \cdot 2n \end{matrix}$$

another example

$$10n^2 + 13n - 3$$

$$(5n-1)(2n+3)$$

	$5n$	$-1$
$2n$	$10n^2$	$-2n$
$3$	$15n$	$-3$



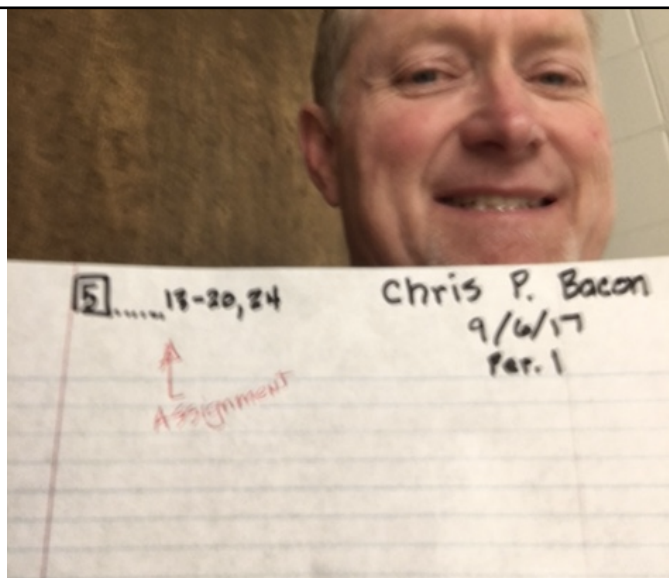
Possib

$$\begin{matrix} 30n \cdot -n \\ -30n \cdot n \\ 15n \cdot -2n \\ -15n \cdot 2n \\ 5n \cdot -3n \\ -5n \cdot 3n \end{matrix}$$

$$15n + -2n$$


B.B.

*How to be addicted to your phone !*



Assignment:

1. Get your supplies
2. Do the first textbook assignment.....

..... 4, 7ad, 8, 18, 21  
↑  
Graph paper

1.... 4, 7ad, 8, 18, 21