

●
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

- Pick it up at the front table.

- do front only

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

$(-\frac{3}{5}x) \cdot (3) \cdot (5xy)$

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. $\underline{\hspace{2cm}} (-3x^2)(3y) = \underline{\hspace{2cm}}$
 13. $\underline{\hspace{2cm}} (-xy)(-xy) = \underline{\hspace{2cm}}$
 14. $\underline{\hspace{2cm}} (-3xy)(-6xy^5) = \underline{\hspace{2cm}}$
 15. $\underline{\hspace{2cm}} (9)(-x^2y) = \underline{-9x^2y}$
 16. $\underline{\hspace{2cm}} (-\frac{1}{3}x^2y)(3x^2y)(2) = \underline{-2x^4y^2}$
 17. $\underline{\hspace{2cm}} (-3x^2)(-3)(4y^2) = \underline{36x^2y^2}$
 18. $\underline{\hspace{2cm}} (-2x)(-9)(xy^6) = \underline{18x^2y^6}$
 19. $\underline{\hspace{2cm}} (-xy)(-xy^2) = \underline{x^2y^3}$
 20. $\underline{\hspace{2cm}} (\frac{2}{3})(9x^2)(3y^6) = \underline{18x^2y^6}$
 21. $\underline{\hspace{2cm}} (2x)(2x)(3) = \underline{12x^2}$
 22. $\underline{\hspace{2cm}} (\frac{1}{2}x)(6x)(2y^2) = \underline{6x^2y^2}$

$x^2 \cdot x^2$

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

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

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

$$\frac{2}{3} \quad \frac{1}{2/3}$$

Yes ^o

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

$$2n = \frac{18}{2}$$

$$n = 9$$

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

$$\frac{2}{3} n = \frac{6}{7} + \frac{1}{n} \quad n$$

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

$+3x$
 $+3x$

$$2 = 8x + 7$$

-7
 -7

$$-5 = 8x$$

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

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

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

$$x = -6.25$$

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.

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

$+3x$
 $+3x$

$$2(3) = (3)4x + \frac{2(3)}{3}$$

$$6 = 12x + 2$$

-2
 -2

$$4 = 12x$$

$$\frac{4}{12} = x$$

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

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

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

$$\frac{3}{10} = \frac{x+1}{3}$$

$$10(x+1) = (3)(3)$$

$$10x + 10 = 9$$

-10 -10

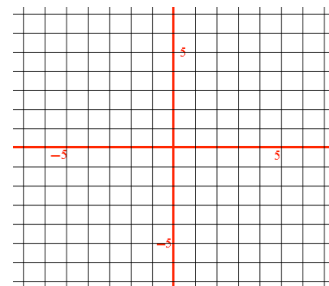
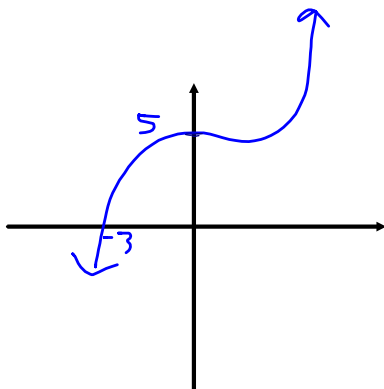
$$10x = -1$$

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

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

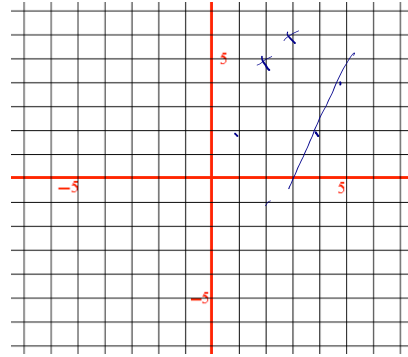
Occasionally you'll be asked to either **sketch** a picture or **graph** a function.

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



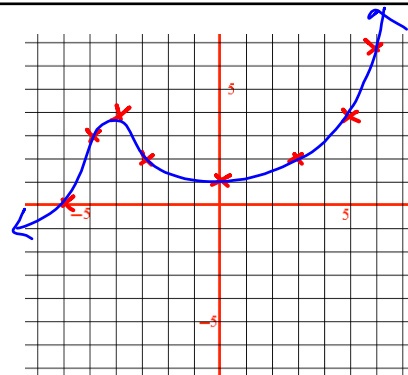
Graphs

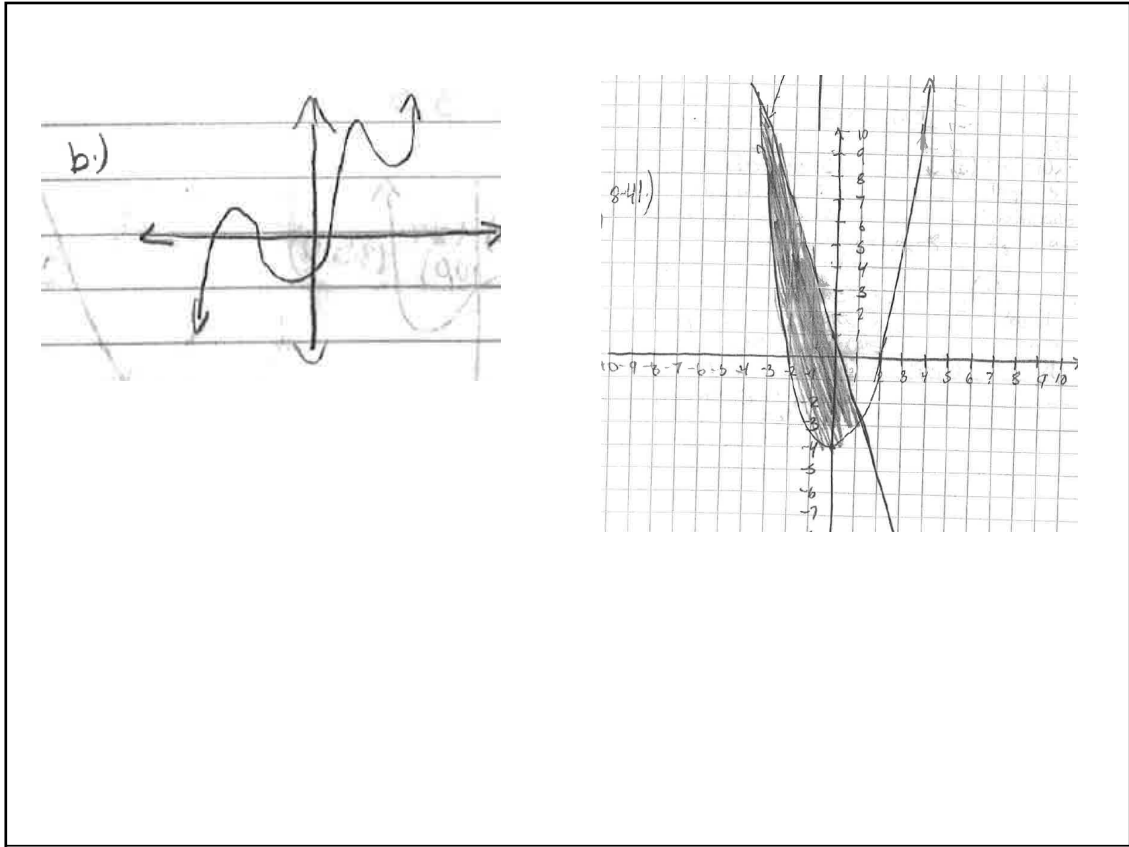
- Plot points accurately
- Graph Paper
- Don't make tiny
- label key points



Graphs

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





Syllabus - Part 2

From Yesterday - ^{Any} Questions on
Supplies ???
or anything else

Partner Warm Up

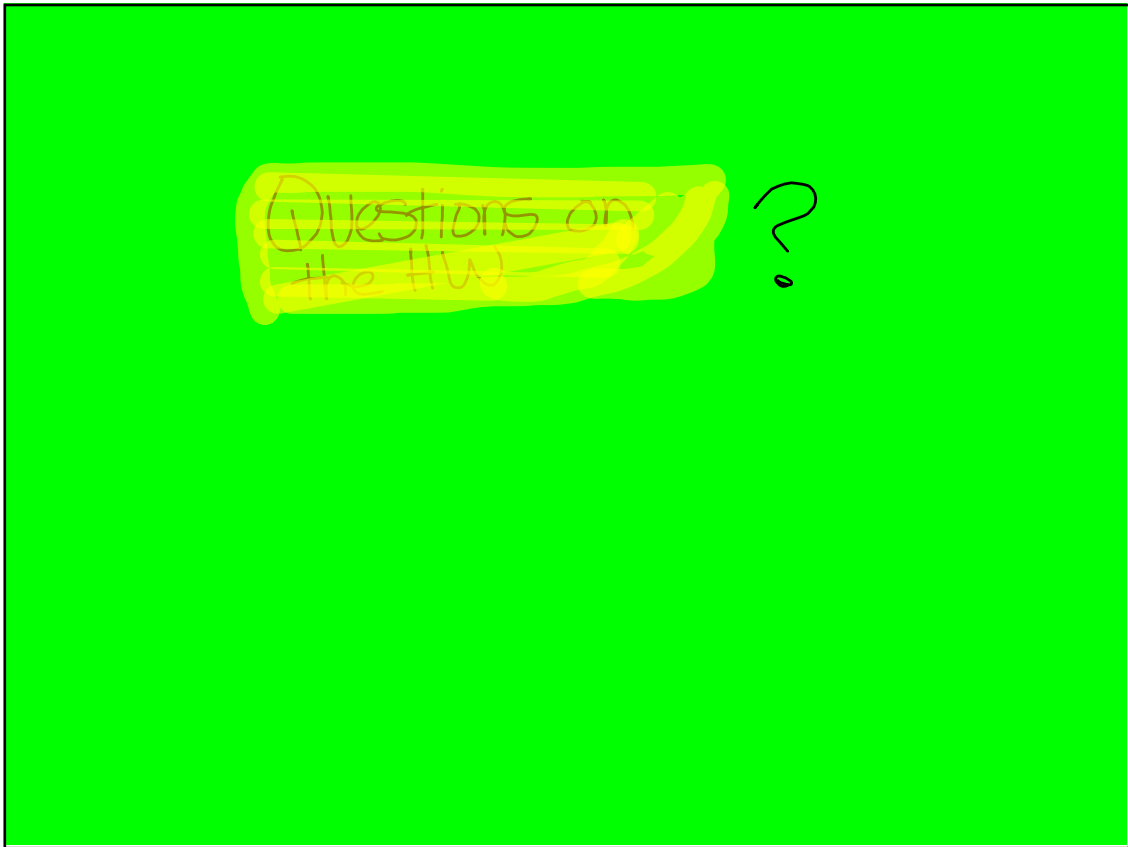
Pull out your syllabus.

Look at sheet two on **Grading Framework**

Put Syllabus

away .

we'll look at ^{the very} last sheet
tomorrow.



Assignment #1
Algebra 2A

Key

Name: _____ Period: _____
Always first and last

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

$3 + 6(5 + 4) + 3 - 7$ yes / no
 $3 + \underline{54} \div 3 - 7$
 $3 + 18 - 7 = \underline{14}$

$(-4)(-3) + 6 - 2[5 - (-8) + (6 + 2)]$ yes / no
 $12 \div 6 - 2[13 + 3]$
 $= 2 - 2[16]$
 $= 2 - 32 = \underline{-30}$

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

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

$$x = 2$$

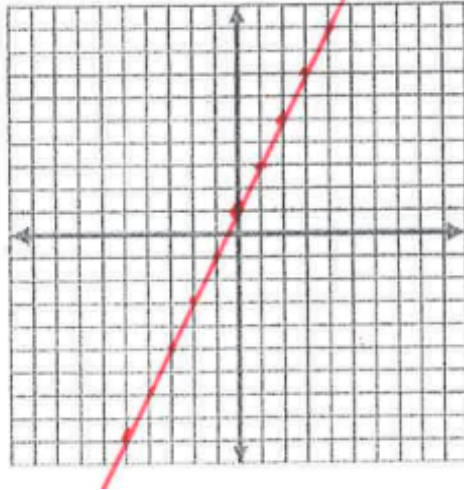
$$\begin{array}{r} 2 + \frac{1}{2}x = 4 \\ -2 \quad -2 \end{array}$$

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

multiply by 2

$$x = 4$$

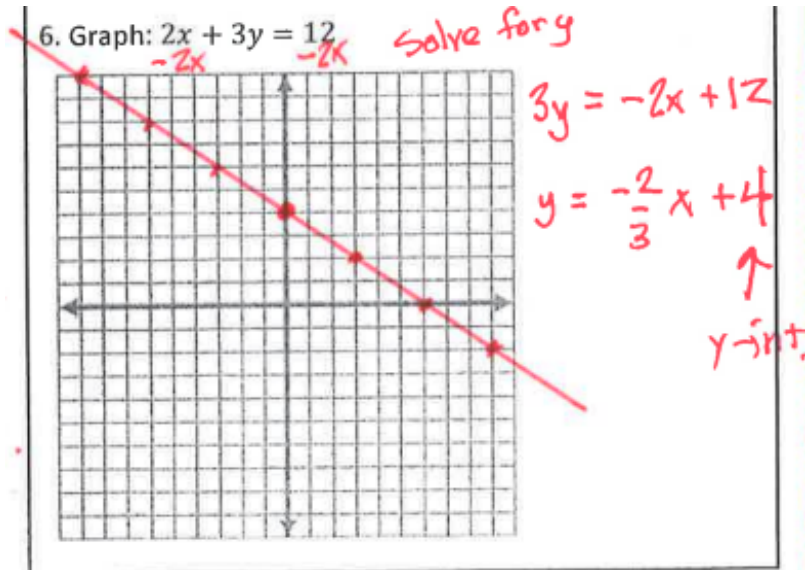
3. Graph: $y = 2x + 1$



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.

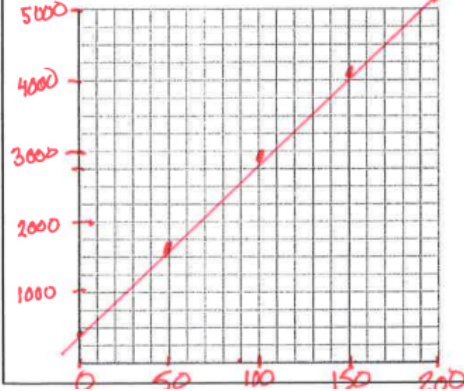
a. Write an equation or rule that represents the function.

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

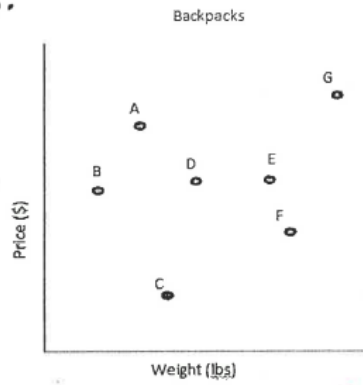
b. Make a table that show how much a trip will cost for 50 students, 100 students, 150 students, and 200 students.

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

period _____ first/last name _____ **Algebra 2 - Unit: _____**

- Before class starts, the following should be written on the top of your paper: **First/last name, Period, and the complete assignment.**
- Once class starts, have your HW visible on top of your desk and the same with this recording sheet. Do not "finish" your assignment in class.
- Using the solutions given to you in class you can edit/correct your homework but you must use ink in a color that clearly stands out from your main work.
- Before the conclusion of HW checking, your score must be written in INK in two places:
 - In the upper right-hand corner on your actual HW.
 - and in column #4 below.

*****Deductions:** Minus 5 points every time you do not have your recording sheet in class. Additional points could be deducted for not keeping up with the recording sheet daily.

*****Deductions:** Minus 5 points every time you do not have your recording sheet in class. Additional points could be deducted for not keeping up with the recording sheet daily.

Day <i>(Mon, Tu, etc)</i>	Date Assigned	HW Description and include Chapter as well as problems Reminder: If you are absent, you are required to check the class website for details before you return.	HW Score from 0 to 4	Explain Special situations
T	12/3	Assign # (WS)		
W	12/4	[] 0 2 1 1		
	/			
	/			

	/			
	/			
	/			
	/			

*Turn in this sheet with the corresponding assignment on test day, prior to the test. (capped at 80% if turned the next 3 days.
Capped at 60% if after 3 days)*

*****Deductions:** _____ **Totals:** ____ / ____

ASSIGNMENT RUBRIC for Algebra 2

Score	Criteria
4	<p>ALL of these qualities are present:</p> <ul style="list-style-type: none"> ✓ Most items correct <u>or</u> attempted with fidelity and there is evidence of this. ✓ All assigned problems are completed with fidelity. ✓ Done on time [before class starts] ✓ Neat and legible
3	<p>Has a moderate problem in <u>one</u> of these areas, or has very <u>slight</u> problems in several areas:</p> <ul style="list-style-type: none"> ✓ Number of errors or some items done without fidelity ✓ Number of incomplete items ✓ Done on time ✓ Neatness/legibility

Fidelity - Doing the problem as intended. It means more than just "attempting". This includes showing steps and work when appropriate. This includes using good terminology and notation.

The spirit of **Fidelity**: I want students who produce some errors to still score well if those errors are the result of misunderstanding or small mistakes, not because they ignored directions or rushed through the assignment.

2	<p>Has a noticeable problem in <u>two</u> areas, or has a mix of problems in several areas. It is obvious that there was not a lot of time/effort put in.</p> <ul style="list-style-type: none"> ✓ Number of errors or items done without fidelity ✓ Number of incomplete items ✓ Done on time ✓ Neatness/legibility
1	<p>Has a problem in <u>more than two</u> areas, or a problem in one area so significant, it reduces the quality of the whole task. It is <u>obvious</u> there was minimal effort</p> <ul style="list-style-type: none"> ✓ Number of errors or items done without fidelity ✓ Number of incomplete items ✓ Done on time ✓ Neatness/legibility

today (but no later than tomorrow)
give yourself an appropriate score
on yesterday's HW.

Tomorrow we will record tonight's
HW for sure.

*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.*

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

$$12 \rightarrow 6 \cdot 2$$

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

$$6m^3 - 3m \rightarrow \begin{array}{l} 3(2m^3 - m) \\ 3m(2m^2 - 1) \end{array} \quad 3m(2m^2 - 1)$$

$$10n^3 - 5n^2 + 20n \rightarrow$$

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.

FACTORING Quadratics

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

↓

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

$$\begin{array}{l} \text{---} \\ \text{---} \\ \bullet 3n + 1n \end{array}$$

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

$$\begin{array}{l} \text{---} \\ \text{---} \\ -n + 3n \end{array}$$

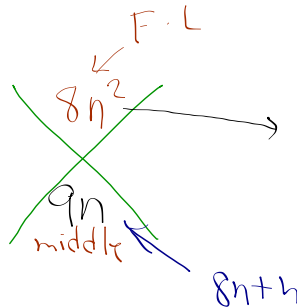
Easy

Any method works

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

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

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



Factor possibilities

$8n \cdot n$

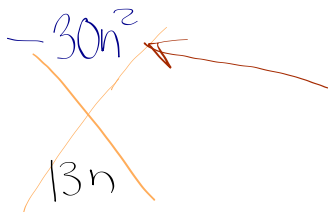
$4n \cdot 2n$

another example

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

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

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



FACTORS

$-30n \cdot n$

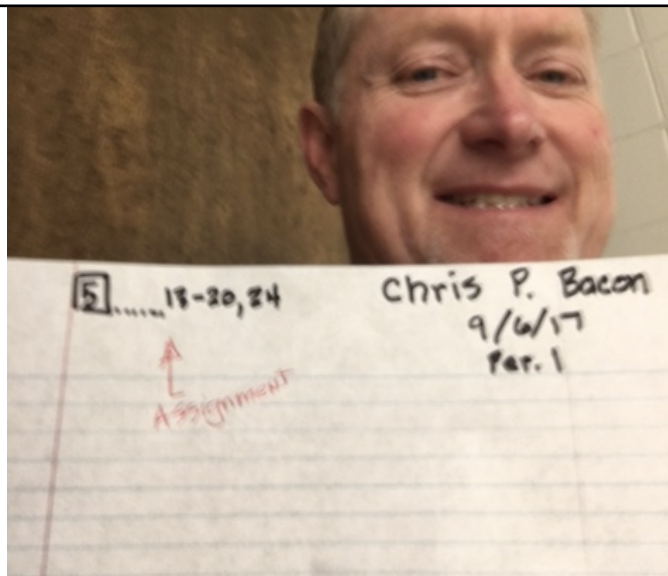
$30n \cdot -n$

$-15n \cdot 2n$

$15n \cdot -2n$

B.B.

How to be addicted to your phone !



To do well in this class, it is very important that you keep up with assignments, practice skills, & make a serious effort to do the problems assigned. Plan to be assigned some exercises almost daily with the expectation that the work will be due the following day.

Assignments are expected to be complete with every problem reasonably answered and the required work shown.

NO WORK=NO CREDIT!

Assignments should be completed neatly with the original problems written out and all work shown.

Assignment:

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

1..... 4, 7ad, 8, 18, 21
↑
Graph paper