Syllabus Discussion

- <u>Blackboard</u>
    - MATH 104 home page
    - course announcements
    - course gradebook for all things not WebAssign
    - weekly schedule: quizzes; homework; help room; videos; lecture notes; exam reviews
    - WebAssign access and written homework
    - class notes in Weekly Content; recommended printing notes

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- Class Attendance
    - Do not be later than 10 minutes.
    - Phone conversations and internet access can wait until after class. Don't waste time and money on social media in class.
    - Work in groups; ask questions; and **write** answers to problems.

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  - two midterm exams @ 20% each (40%)
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- groupwork @ 5%: starts in class the day it is scheduled; turn in individual work Friday after it is scheduled

Getting to Know Each Other

Complete the questionnaire for MATH 104. On the back of your questionnaire, please answer the additional following questions.

(8) What is the highest mathematics course you have completed?

(9) Describe how you perceive your abilities with algebraic manipulations. What is your experience with trigonometry? What is your experience with graphing functions?

(10) Have you ever worked in groups before? How do you feel about working in small (2-3 person) groups?

(11) Is there anyone in class with whom you would prefer to work?

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$a = 1$

$b = -4$ $\qquad x = \dfrac{-(-4) \pm \sqrt{(-4)^2 - 4(1)(-5)}}{2(1)} = \dfrac{4 \pm \sqrt{36}}{2}$

$c = -5$

$x^2 - 4x - 5 = \left(x - \dfrac{4 + \sqrt{36}}{2}\right)\left(x - \dfrac{4 - \sqrt{36}}{2}\right) = (x - 5)(x + 1)$

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- Ex.: Factor $4x^2 - 9$ using the Difference of Squares Formula.

$$a = 2$$
$$b = 3$$
$$4x^2 - 9 = (2x - 3)(2x + 3)$$

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- Ex.: Factor $8x^3 - 343$ using the Difference of Cubes Formula.

$$a = 2, \quad a^2 = 4$$
$$b = 7, \quad b^2 = 49$$
$$ab = (2)(7) = 14$$
$$8x^3 - 343 = (2x - 7)(4x^2 + 14x + 49)$$