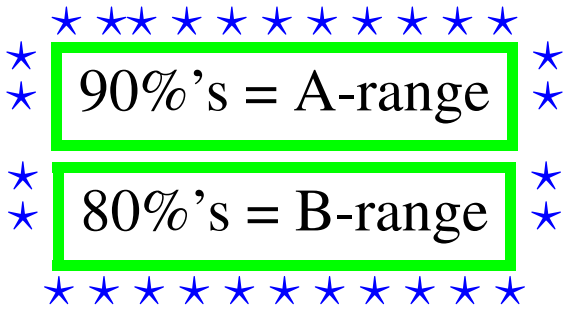
Welcome to class!

with Prof. D'Ambroise

High Expectations

Grading Standards



74-79% = C or C-plus = passing

70-73% = C-minus = failing
60%'s = D-range = failing
below 60% = F = failing

All students are held to the same high standards regardless of job/home/other class responsibilities.

Grading Standards

Aiming to surpass is the best strategy!

90%'s = A-range

80%'s = B-range

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Failing Mentality
(for lack of a better word)

- go to class
- do assignments
- take exams

Mentality for Success

- prepare in advance
- go to class
- discuss with your peers & communicate with prof.
- do assignments
- think, ponder, ask questions, review, revise
- take exams
- be realistic & evaluate your progress honestly

Math is vast!

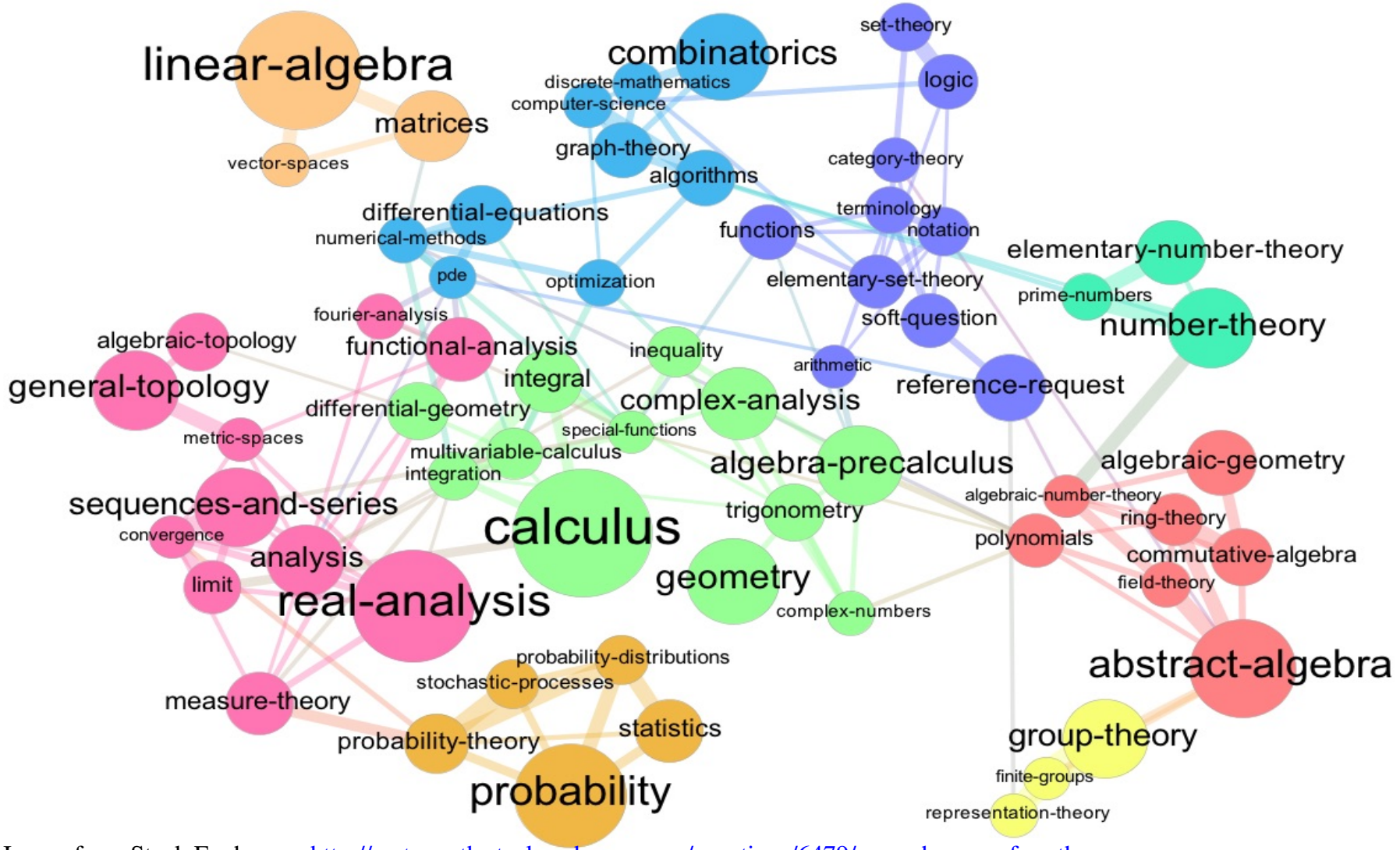

Image from Stack Exchange: http://meta.math.stackexchange.com/questions/6479/a-graph-map-of-math-se

Warning on outside resources

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If you use outside resources you must follow up with
reading the book, coming to office hours,
and interacting with *our* course material.

Only your Prof. can tell you what WE focus on in THIS class!

Harmful Math Stereotypes

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It's a vicious cycle:
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then you won't work hard enough & you won't do well,
then your false belief that you can't do it will be verified!

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BREAK THE CYCLE
by working hard
and learning to communicate & ask for help.

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Don't handicap yourself by adopting
false beliefs about your abilities.
Work hard and LEARN HOW to read a math textbook.

Tips: Skipping around is recommended for math!
(math textbook $\neq$ novel)
Be persistent, ask questions, take notes.
Actively engage, don't be passive.

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- Math is an Inborn Talent

  False.
  Math is an acquired skill that takes
  hard work and dedication.

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Don't handicap yourself by shutting out peers, the prof., tutors, etc..

Communication is essential to learning math!

Mentality for Success

Too proud to get help?

Mentality for Success

Too proud to get help?

You're at risk for failure.

Advice From Students

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This class is a commitment.
Plan wisely.

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Higher math is conceptual.

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- ... making study sheets helps with understanding the concepts."

WHY?

There is A LOT of information in this class.

Quick summaries help to reduce the cognitive load.

Five Stages of Learning

1. **Novice:** technically knows the rules but has little or no situational understanding and cannot adapt quickly
2. **Competent:** understands different situations, exceptions, or deviations from the rules

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4. **Expert:** rules are instinctual & automatic, student has practiced so much they not surprised by exam questions
5. **Mastery:** (rare) mental energy no longer needed to produce nearly perfect results

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4. (decent outcome: A or B) **Expert:** rules are instinctual & automatic, student has practiced so much they not surprised by exam questions
5. (decent outcome: A or B) **Mastery:** (rare) mental energy no longer needed to produce nearly perfect results

Memes


UniqueTeachingResources.com
"Life begins at the end of your comfort zone."
~ Neale Donald Walsch


There is no elevator to success.
You have to take the stairs.
Unique Teaching Resources

Everyday

The next few pages are designed for courses with online HW.

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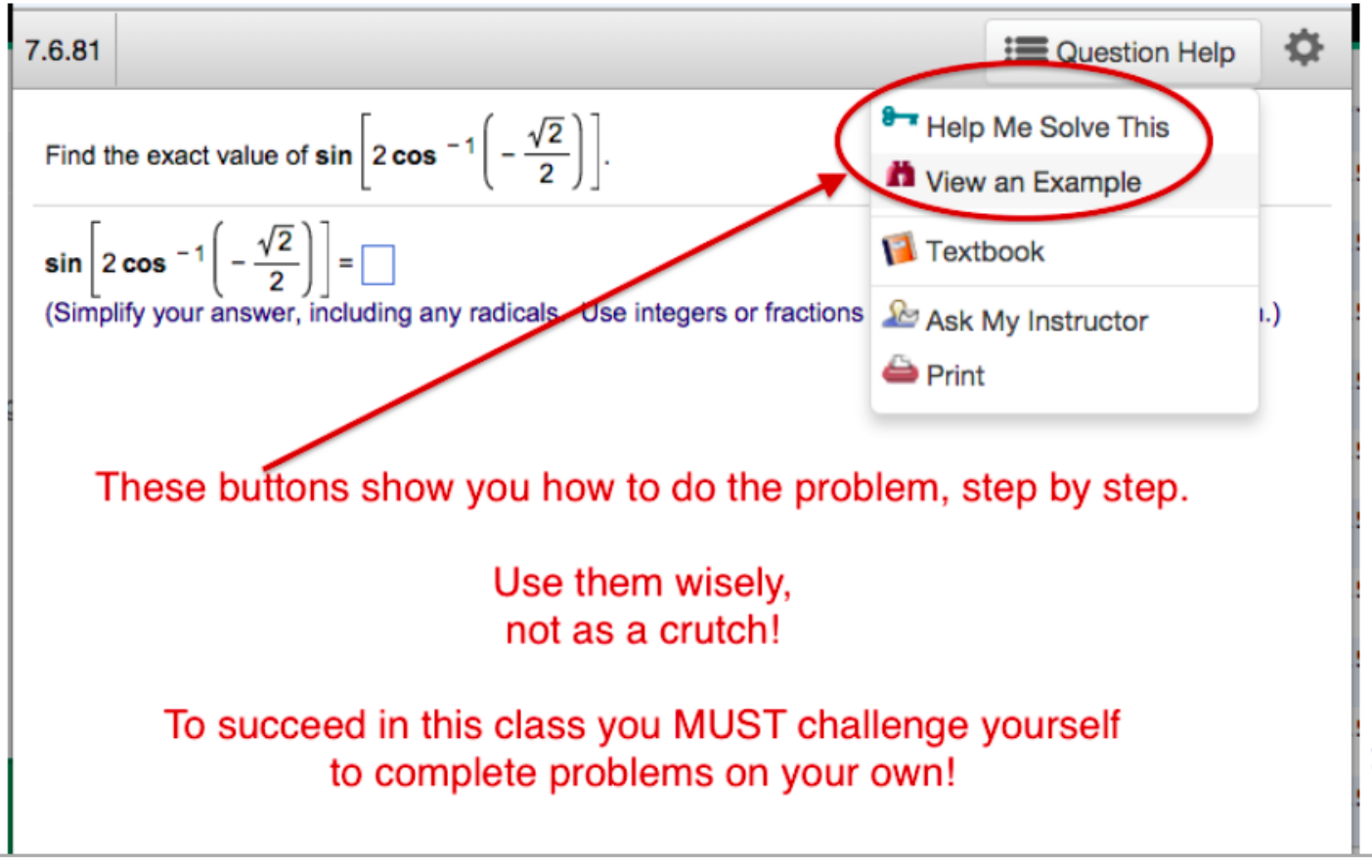
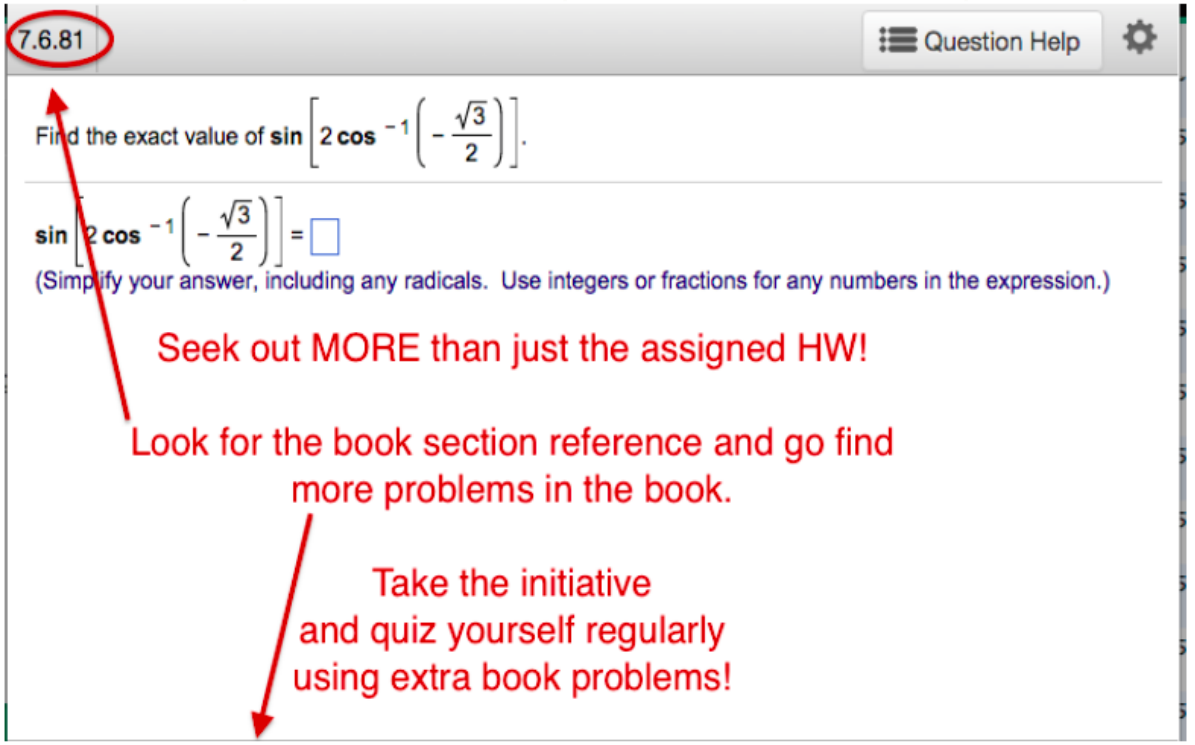
You cannot surpass novice level if you rely too heavily on provided instructions.



You cannot surpass the competence level if you don't test yourself frequently.



In Problems 81–92, find the exact value of each expression.

81. $\sin\left(2\sin^{-1}\frac{1}{2}\right)$ **82.** $\sin\left[2\sin^{-1}\frac{\sqrt{3}}{2}\right]$ **83.** $\cos\left(2\sin^{-1}\frac{3}{5}\right)$ **84.** $\cos\left(2\cos^{-1}\frac{4}{5}\right)$