

Test Anxiety Quiz: Order of Operations

- $\left(\frac{11}{6} + 2\right)^2$
 - $\left[\left(2\frac{4}{5} - \frac{6}{5}\right) \div 3\frac{5}{6}\right] \left[\left(3\frac{1}{2}\right)\left(2\frac{5}{6}\right) - 1\frac{3}{4}\right]$
 - $2^2 - (13 - 5) \div 4$
 - $(6)[(9 + 7 - 4) \div 3]$
 - $\frac{6 - 3}{(2)(1 + 3) - 5}$
 - $[14 + 17 - (3 + 2) - 6] \div 5$
- Try every problem
 - Show as much work as possible
 - Reduce/Simplify your answers as much as possible

Incorporating Test Taking Skills into Mathematics Courses Nearly Painlessly

Emily Miller

UNM Valencia

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efryer@unm.edu

www.unm.edu/~efryer

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- $14\frac{25}{36}$

- $3\frac{47}{115}$

- 2

- 24

- 1

- 4

Combating Test Anxiety

- Have good study habits
- Be organized
- Time management
- Studying in the right environment
- Confidence
- Familiarity with test
- Don't cram
- Start somewhere
- Teach these in class!
- Make them organize in class and create a study schedule
- Always do study activities under test like conditions
- Over prepare them
- Make sure they have seen what it will look like
- Teach them to try every problem
- It is okay to be wrong

Tried and True Methods

- Aversion therapy
 - Stress changes the way the brain works
- Making tests/quizzes routine makes them routine
- Have students practice test taking strategies on tests/quizzes
- Have students study and prepare to study in class
- Teach them to only study what they don't know
 - Which means you have to know what you do know

It Is Okay To Be Wrong

- Encourage students to compare answers
- Encourage students to teach each other how to do problems
- Get students up to the board
- Let students revise work
 - Penalize for incorrect answers
 - Give incentive for correcting and explaining the problems they got wrong

$$1) (-3) - 4 + (-2) - (-6) + 5$$

$$-7 + (-2) - (-6) + 5$$

$$-9 - (-6) + 5$$

$$-9 + 6 + 5$$

$$-3 + 5$$

$$2$$

- First I combined negative three and negative four to get negative seven.
- Then I combined negative seven and negative two to get negative nine.
- Next I took the two negatives between the negative nine and the negative six and made them addition.
- After that I added six to negative nine to get negative three.
- Last I added five to negative three to get two.

I originally missed this problem because I forgot to change the two negatives into a positive in the third step.

Study Strategies To Do in Class

- Make summary note-cards
- Keep a running list of problems they have trouble with
- Flag notes that they frequently go back to
- Have students write notes on the board
- Make students express themselves in words
 - Reading problems and solutions out loud
 - Make them write notes in words instead of example problems
- Label, Label, Label, Label, Label, Label
- Teach them to ask themselves, “Will I remember this in three months?”

Cause Stress

- Pop quizzes
- Lots of tests and/or quizzes
- Review activities
- Time everything
 - You can always give them more time, but don't make a habit of it
 - <http://www.online-stopwatch.com/>
 - Even if your tests/finals are not timed
- New topics on quizzes

Test Taking Strategies To Try in Class

- Try every problem
 - Once students get going, they do better
- Write out every step
 - Students who write out every step are less likely to make “stupid mistakes”
- Label every problem Easy, Medium, or Hard
 - Students tend to get more points if they work the easy problems, then the medium problems, then the hard problems
- Data dump and/or how to use a Formula Sheet
 - Prep students for this one
- Check your answers
 - Make them show the check on the activity

My Test Anxiety Quiz Rubric

- Every problem is worth 2 points
 - 1 point for work (correct or not)
 - 1 point for the right answer (completely correct with units)
 - I use the harsher standards than would be used on the final
- There are 5 more points for using the day's test taking strategy

Types of Activities

- Paper quizzes/tests
- Clickers reviews
- Races
- MyMathLab/ALEKs/etc. quizzes/tests
- On the board quizzes
- Go to the board activities
- Quiz your neighbor activities

Throughout The Semester

- One topic at a time
 - Create an outline so students know what is coming up
 - Use Test Anxiety Activities to move them along
 - Quick feedback
- Cumulative Review
 - Anything covered goes
 - Let them use their notes if they can
 - Afterward, have a “what did I need to know that I didn’t session”

For The Final

- All Cumulative All the Time
- Make it harder and longer
- Always use “Final Conditions”
 - Be Mean
 - Call them out
- Let Students lead review sessions
- Encourage and reward students for working through problems they don't know on the board

Incorporation

- 5 questions in 5 minutes at the beginning of class
 - Make the make-up quiz harder or longer or both
- Cut one week of review at the beginning, add one at the end
- Start using the phrase “Put that on a note-card”
- Make review materials available even if not assigned

How Can You Fit In Test Taking Strategies Throughout The Semester?