

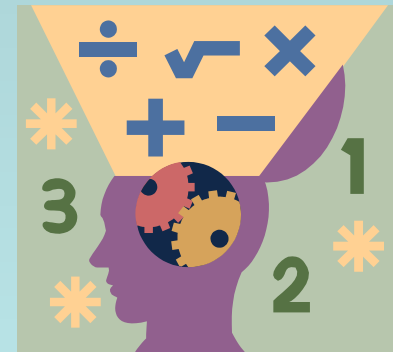
Managing the Mean Math Blues

*Getting in the Zone with
Math Anxiety*

- **These workshops are brought to you by**
The Worry Club of EvCC



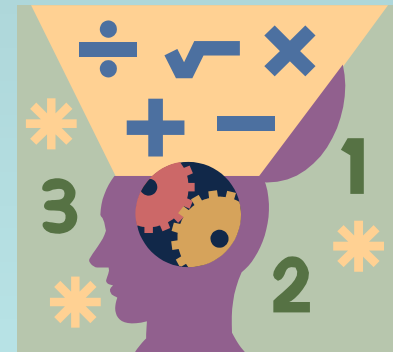
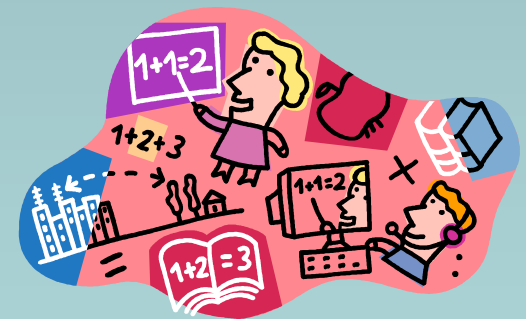
- ***Part 1: Getting in the Zone with Math Anxiety***
- ***Part 2: Positive Thinking is a + Sign***
- ***Part 3: Tackling Testing Tremors***



Part 1

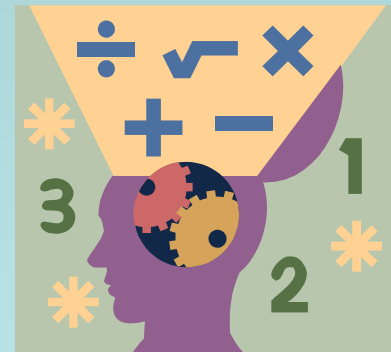
Getting in the Zone with Math Anxiety

- What does Math Anxiety look like?
- Where does it come from?
- How can you deal with it right now?



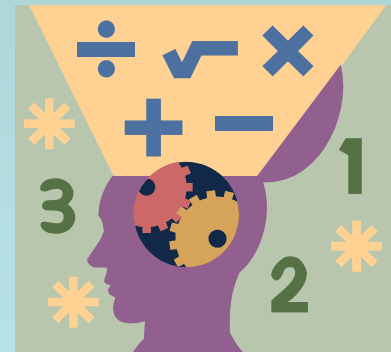
Symptoms of Math Anxiety

- A. Hyperventilation.
- B. Holding your breath.
- C. Sweating profusely, while holding your breath.
- D. Panic
- E. Paranoia
- F. Avoidance
- G. Feelings of guilt
- H. Nausea
- I. Blocking out
- J. Lack of concentration



The *Real* Sources

- There is no *single* cause
- Previous negative classroom experiences can impact our anxiety. For example:
 - *Insensitive instructor*
 - *Public Embarrassment*
 - *Pressure of Timed Tests*
 - *Learning Style not considered*

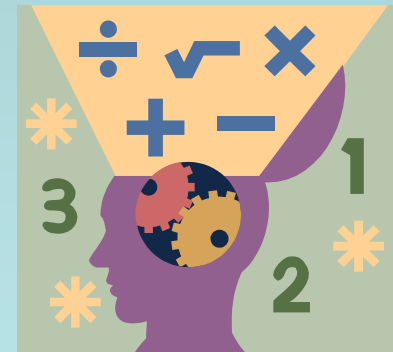


- **Pressure or Ridicule from**

- *Parents, Siblings who don't understand*
- *Classmates who learn at a faster rate or a different way*

- **Poor Math Attitude**

- *Our society/culture reinforces that it's okay to not like math*
- *External locus of control*
- *Cognitive distortions – faulty beliefs*
- *Self fulfilling prophecy*



•Insufficient Preparation

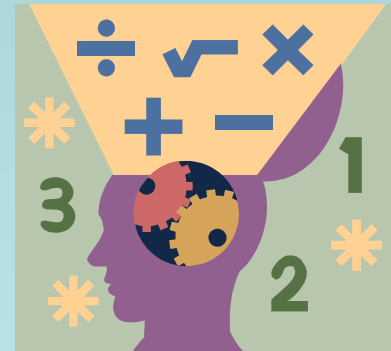
- Reading Level*
- Math Study Skills*
- Time*
- Lack of Test Taking Skills or Test Anxiety*

•Math = Pain & Frustration 🤔

- Associate Math With : Unpaid Bills, Unforeseen Debts, IRS Forms, Unbalanced Checkbooks!*

•Sexism

- A world seemingly dominated by math instructors who are white males*



What can get in the way of success?

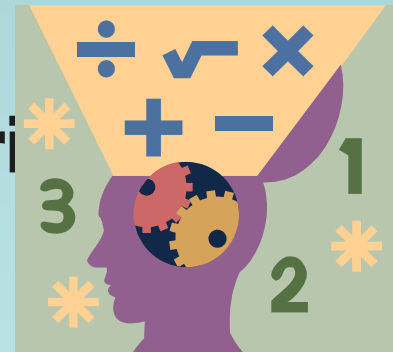
Common Myths surrounding success in math

- Genetics

- “My mom told me that she was never good at math, so I probably won’t be either!”

- Guess what – it’s NOT related to genetics!

- Maybe your mom didn’t have the right tools when she took math!

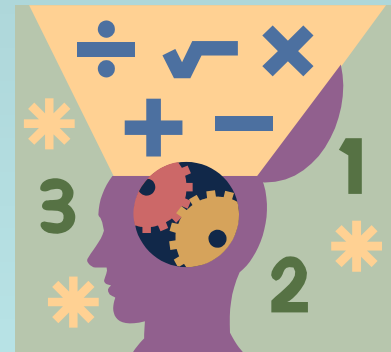


What can get in the way of success?

Common Myths surrounding success in math

- **Ethnicity**

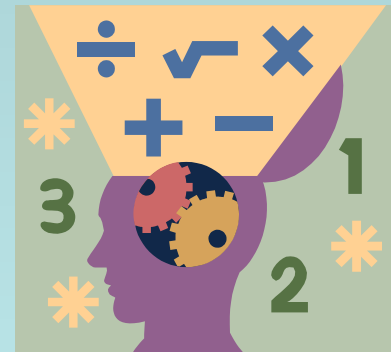
–Some people think that certain ethnicities have an “edge” when it comes to math or science. It could be that those students have made a special time and place to study Math.



What can get in the way of success? Common Myths surrounding success in math

- **Age**

- You are never too old to learn math!
While it is easier to learn math when you are younger, with a little more work you can overcome this!

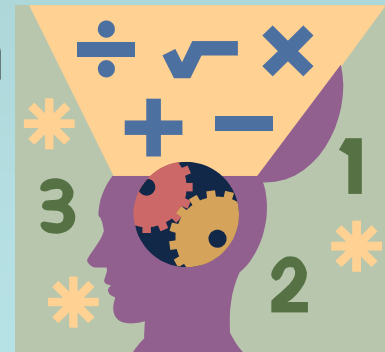


What can get in the way of success?

Common Myths surrounding success in math

•Speed

–Do you feel like everyone else does math faster than you? Practicing (and practicing, and practicing more) will help you to build speed. Remember – you have to walk before you can run!

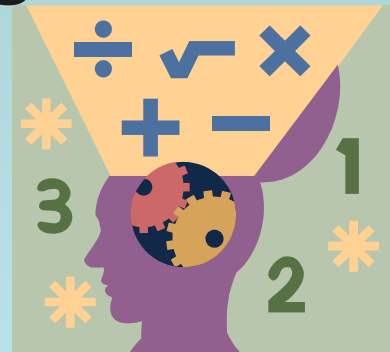


What can get in the way of success?

Common Myths surrounding success in math

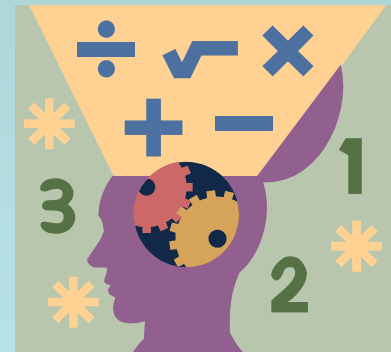
- **Don't need math**

- Even though you don't realize it, you use math almost every day: balancing your checkbook (or debit balance), doing a household budget, figuring out how much a sales item costs.
- You can probably name more!

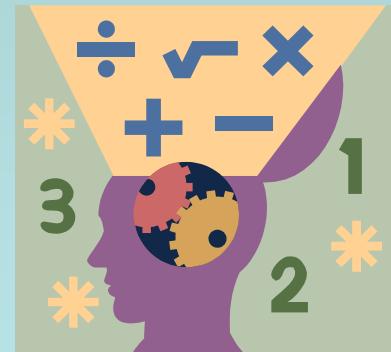


What can you do **RIGHT NOW?**

- **Ask questions in class or during instructor's office hours. Also, form a study team.**
- **Practice, practice, practice.**
- **Read the textbook, do lots of problems, take good notes.**
- **Admit you need help!**
- **Then get help!**
- **Talk and think math.**



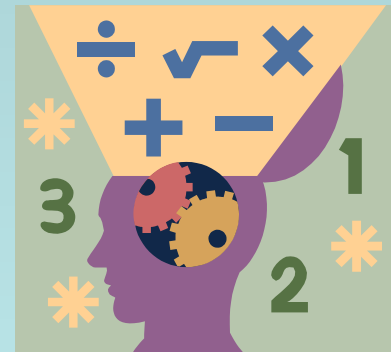
- Overcome negative self talk – turn off that recording!!
- Make sure your study environment is conducive to learning.
- Find your learning style.
- Here is an example of a learning style inventory:
- <http://ttc.coe.uga.edu/surveys/LearningStyleInv.html>



LEARNING MODES

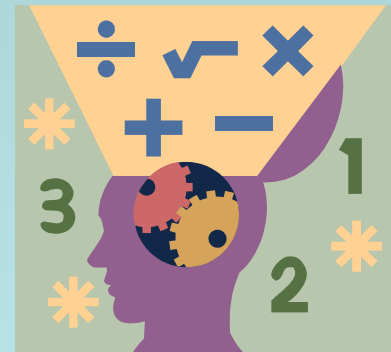


- Everyone accesses and processes information from our environment – not just the academic environment - differently. What's your learning style?



Using your learning style to your advantage

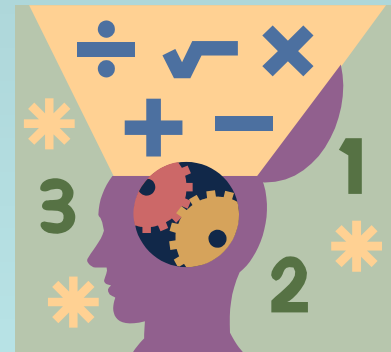
The more activities you involve in your learning, the more easily you will learn. Use your primary learning mode to compensate for the other two modes. Adapt material given in a different style to your own style. Experiment with the other modes to improve them and therefore improve your learning.



VISUAL LEARNER



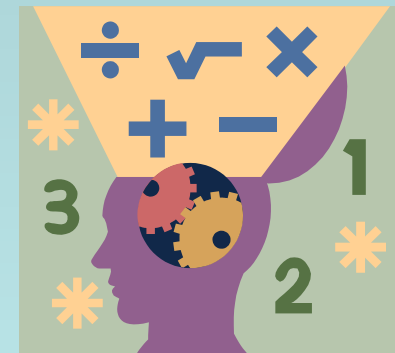
- **Sit in the front of the room so you can see everything!**
- **List your tasks so that you can have the visual satisfaction of crossing off completed tasks.**
- **Make your learning environment pleasant to look at.**
- **Clear your desk or work area of clutter – it will help clear your mind, too.**



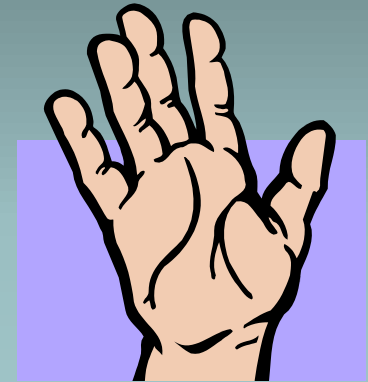
AUDITORY LEARNING



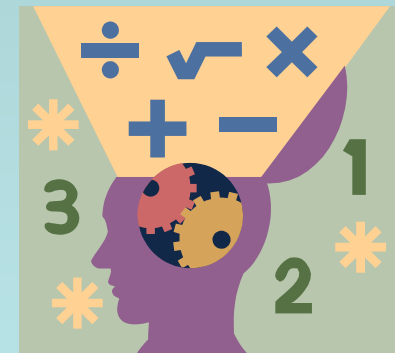
- **Choose the best classroom location for hearing everything.**
- **Tape record the class – most instructors don't mind (assuming you ask).**
- **Ask questions and LISTEN CAREFULLY for the response.**
- **Read your textbook and notes aloud.**



KINESTHETIC LEARNING



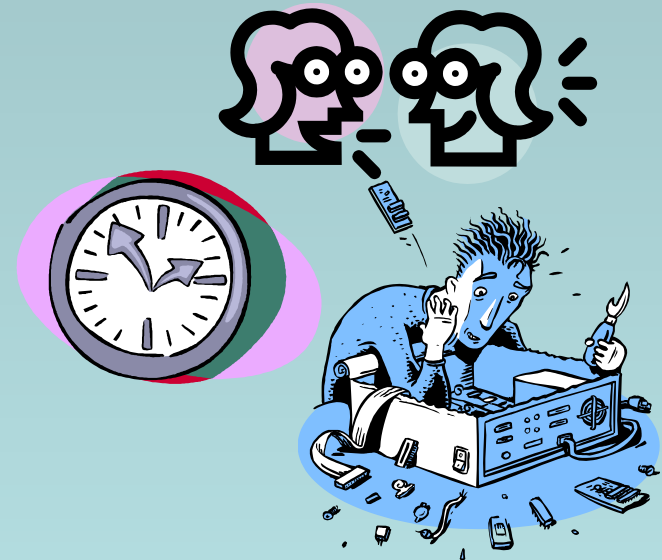
- **Sit where you can most actively participate in all classroom events.**
- **Take notes carefully – the activity helps you better remember what you’re writing.**
- **As you study, walk around. Walk and at the same time talk about the material you are trying to remember.**
- **Work at a chalk board or white board whenever possible.**

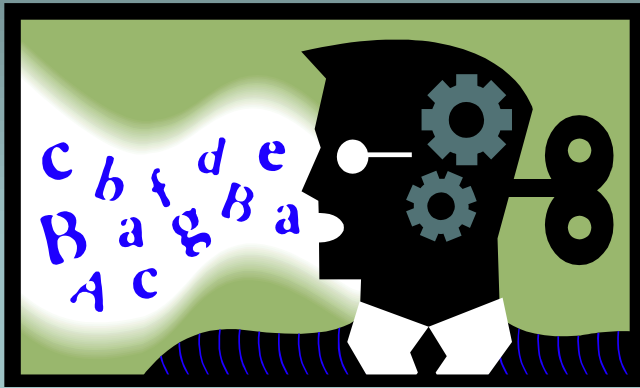


Part 2

Positive Thinking is a + Sign

- **Stopping the negative self-talk**
- **Reducing anxiety**
- **Time Management**





SELF TALK

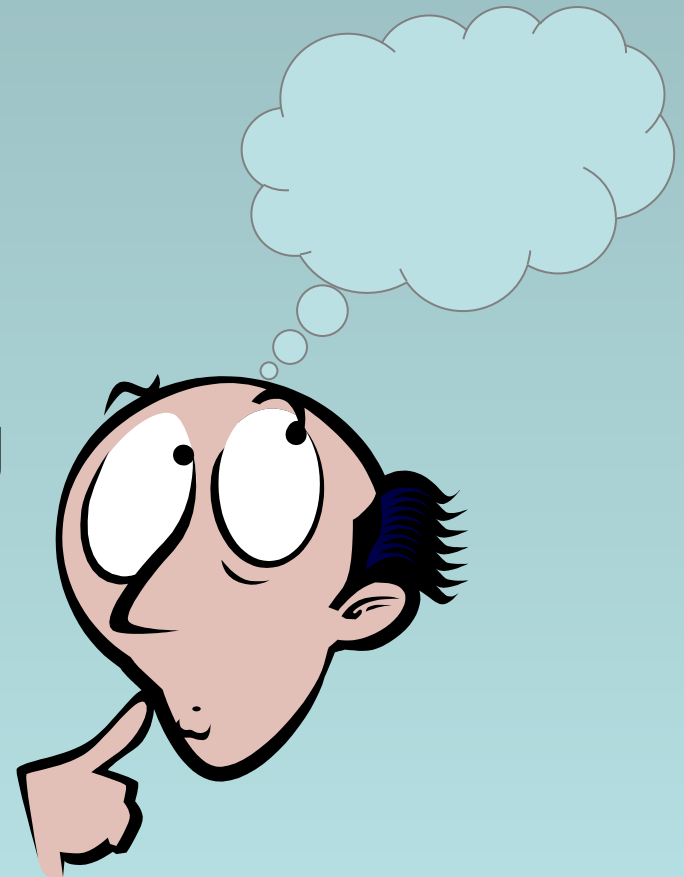
What is it?

- **The running commentary in our heads**
- **Are you aware of your internal monologue?**
- **Is there a “pattern” to your self talk?**

- ***Harmless self talk:*** I need to stop at the cleaners.
- ***Harmful self talk:*** I'll never be as good at math as the other students.
- Many of the "mind-gurus" claim 80% of what the average person says to themselves is damaging to our self-confidence.
- It may take as many as 20 positive thoughts to "outweigh" or "replace" just 1 negative thought!

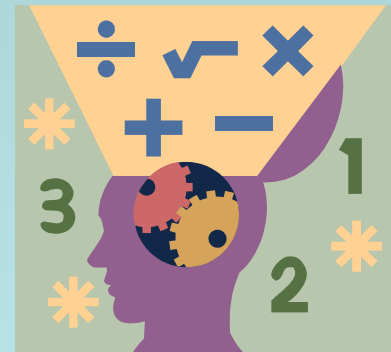
A Look at Irrational Thoughts

- **All or Nothing**
- **Over generalizing**
- **Mental Filter**
- **Jump To Conclusions**
- **Emotional Reasoning**
- **I "Should have"**
-



How do I change?

- **Through Awareness and Practice!**
- **Keep a Log**
- **Thought Stopping**
- **Thought Substitution / Affirmations**
 - ❖ *Thoughts stated in the positive*
 - ❖ *The more specific the better*
 - ❖ *Keep them private*



Anxiety Reduction



• Life style issues

- Sleep (get enough)
- Caffeine (don't get too much)
- Eating Nutritious Foods (makes you feel better)
- Exercise (also makes you feel better)
- Alcohol & Drugs (avoid!!!)



Relaxation Techniques

- *Deep* Breathing
- Count backwards from 100
- Yoga
- Body Scanning



Is some of your anxiety caused by never having enough time?

- Do you regularly pull “all-nighters”?
- Is the alarm clock your enemy?





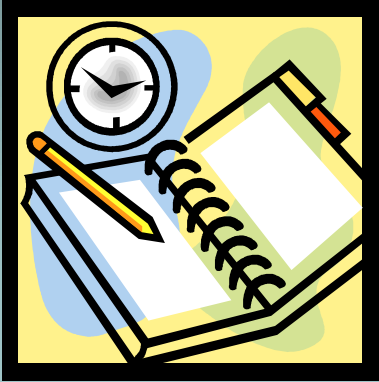
Time flies...

- **Do you often “wing it” ?**
- **How can you make the most of your day?**
- **What are the elements of good time management?**

Change Your Time Habits

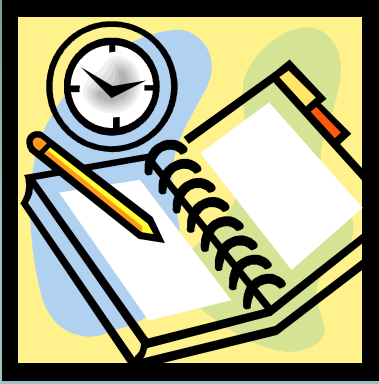


- Defy Parkinson's Law
- Obey your alarm clock!
- Take a "time out"- a little break occasionally won't hurt!
- Jot things down on a note pad or 3x5 cards and regularly review them.
- Make the most of "hidden time" (standing in line, waiting in traffic)



Use Scheduling Techniques

- Use the **Three-Part Scheduling Plan**
- Lay a foundation with a *Master Plan*
- Account for changing details with a *Weekly Schedule*
- Provide a game plan with a *Daily Schedule*
- *You can download calendars from [websites!](#)*



Use Scheduling Techniques

- **Adapt your schedule to account for changes (changes in class schedule due to weather, illness, etc.)**
- **Make your schedule Assignment Oriented (mark your assignment due dates on your planner!)**

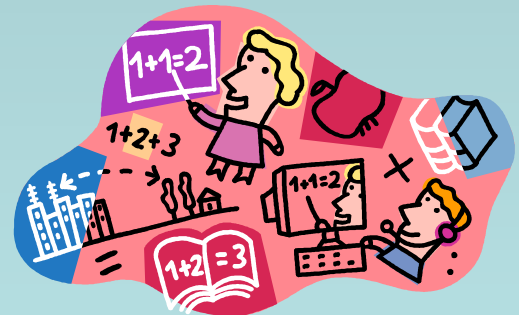
Valuable Tidbits on Time

- **Write neatly the first time so you don't have to take time to do it again.**
- **The greatest time saver is concentration. Once you start working on something, keep your mind glued to it.**

Part 3

Test Taking and Study Skills

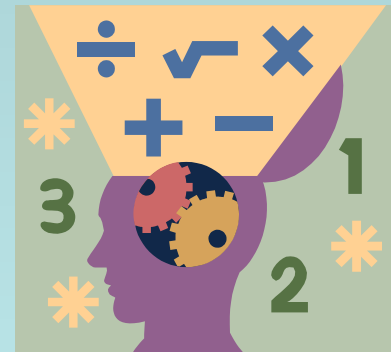
- **Test Preparation and Study Skills**
- **Test Anxiety**
- **Test Taking Strategies**





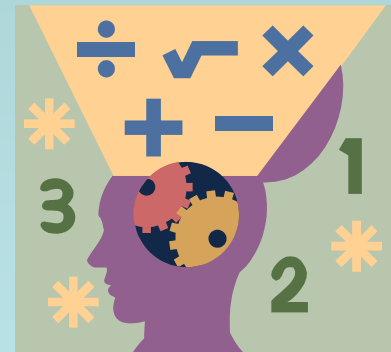
Is this you?

- *"I know the material inside and out, upside and down, but when I sat down with that test in my hands, I forgot everything..."*



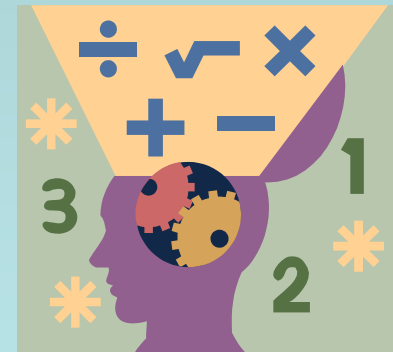
Build Strong Study Habits

- **Attend class daily**
- **2-3 hours daily homework**
- **Study as soon after math class as you can**
- **Have a quiet study space**
- **Ask lots of questions**
- **Stay on top of studies – use time management**
- **Master the content!**



Build Strong Study Habits

- Access tutoring (*it is FREE*)
- Visit the Tutoring Center in Rainier 119. The Center provides drop-in support for math classes as well as workshops and support for group study sessions. And it's FREE! The Tutoring Center is open Monday – Saturday
- Fall Quarter Hours
Mon - Thurs: 8:00am - 6:50pm
Friday - 8:00am - 2:50pm
Saturday - 9:00am - 1:00pm

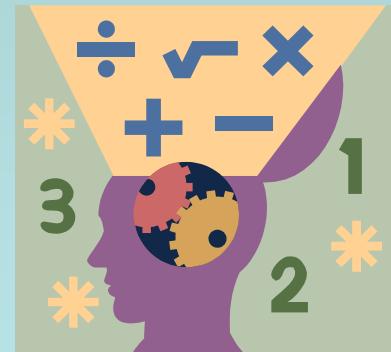


eTutoring

- Logon to <http://etutoring.org/login.cfm?institutionid=195>
- On the left side of the page, type in your username and password and ensure that the 'student' button is selected at the bottom of the login box.
- Username: Same as your Angel and network login (first initial + middle initial + full last name)
- Password: Your Student ID Number

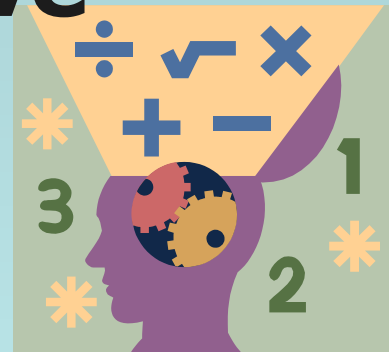
Memory

- **Memory techniques**
 - ✓ *Flash cards*
 - ✓ *Visualization*
 - ✓ *Learning style*
 - ✓ *Mnemonic devices*
 - ✓ *Acronyms*



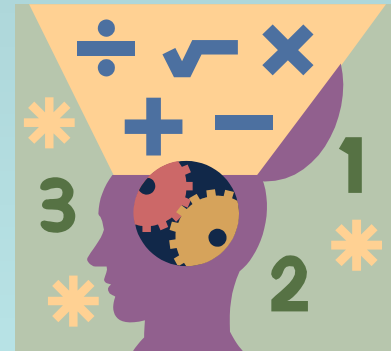
Long term test prep

- **Determine test content and test type**
- **Overlearn**
- **Are there clues from a previous test?**
- **Health & attitude are important to keep you positive**



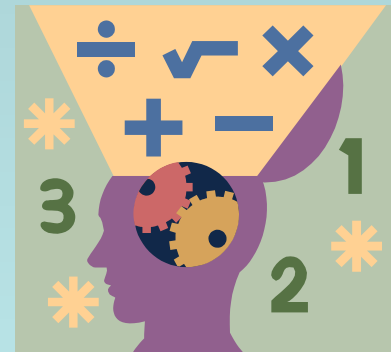
Long term test prep

- **Review, review, review, and make sure you are keeping up the pace.**
- **Create practice tests – timed to re-create the testing environment**
- **Remember self talk and visualization**



Short term test prep

- A good night's rest & nutrition will help prepare your body and mind
- Be on time!
- Call upon your practiced relaxation techniques.
- Self talk & affirmations keep you positive
- Short term review will help jog your memory.



Math Test Anxiety

- **Just reducing math anxiety alone will not make you successful on your math test.**
- **You can reduce it by being prepared.**
- **A LITTLE anxiety is good**
 - **It motivates us to prepare**
 - **But too much can interfere with test**

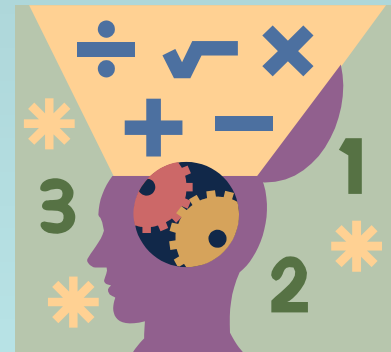
All Math Anxiety is Learned

- Remember the first time you had anxiety?

- *What happened?*

- *How did you feel?*

- You can **UN-learn** it!



UN-Learning It

- **Remember your last positive math experience**
 - *What happened?*
 - *How did you feel?*
- **Positive Affirmations**
 - *I CAN reduce my math anxiety.*
 - *There is no reason for me to continue being math anxious.*

Things Math Anxiety Affects

- **Study Habits**
 - Avoiding class material, not retaining information while studying, avoiding taking math
- **Class Participation**
 - Fear of asking questions, talking to teacher, going to class, talking to other students
- **Brain Functioning**
 - Slows processing, keeps two centers of brain from communicating

To Change Math Anxiety

Change the things it affects. . .

Change the things it affects

- **Class participation:**

- **Make an appointment with your teacher**
- **Ask the teacher to solve an extra problem**
- **Put a problem on board before class**
- **Prepare questions before class, ask in the first 15 minutes**
- **Use email or Angel to ask a question**
- **Take notes short hand and review with a buddy right after class**

How Does Anxiety Affect Brain Functioning

- **Anxiety uses-up working memory in the brain**
 - **It keeps your brain in fight/flight mode**
 - **It slows the processing time**
 - **It sometimes stops “emotional center” of brain from communicating with the “storage center” of brain – you can’t access what you know!**

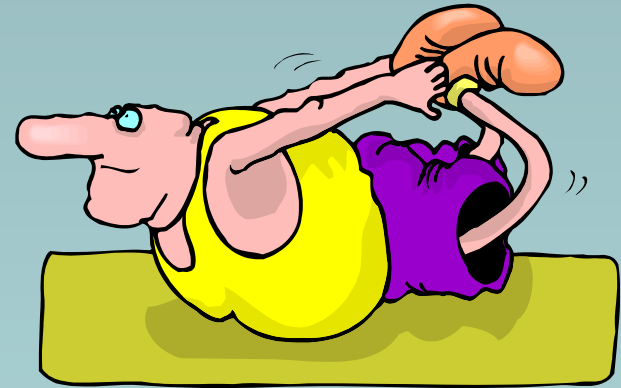


Change the things it affects

Brain Functioning

–Use Relaxation Techniques

- *Deep Breathing*
- *Counting Down*
- *Scanning*
- *Healthy lifestyle*



When studying for a math exam you have two main goals:

- To learn the material so you can do well on the exam;
- To *really* learn the material so you can do well on *every* math exam.

What will be on the test?

- **Have you ever said, “I didn’t know that would be on the test”?**
- **In addition to knowing what topics are on the test, you should know what kind of questions you’ll be asked:**
 - *Multiple choice*
 - *True/False*
 - *Fill in the blank*

Review Sessions

- **Will the instructor hold a review session?**
- **Is the instructor available for questions right before the test?**
- **Are some classmates getting together for a review “party”?**
 - *Where and when will you study and with whom?*

Equipment

- **What should you take along on exam day?**
 - *Pencils?*
 - *Calculator?*
 - *Extra paper?*
 - *Textbook?*
 - *Notes?*



After the test...

- **Review your exam for weaknesses.**
- **“Oh, that’s just a stupid mistake.”**
- **Is there any such thing as a stupid mistake?**
 - *Did you read the directions?*
 - *Did you understand the directions?*
 - *Was it an arithmetic/algebra mistake or a failure to understand a process or procedure?*

After the test...

- **Review the *entire* exam (including what you got right.**
- **Did you make the same mistake repeatedly?**
- **If you really don't understand your mistake, make an appointment to see your instructor or visit the tutoring center.**
- **Re-read the section in the book that covers that material.**

Exam Debrief

- **Did you do everything you needed to do to prepare for the test?**
- **Make a list of three things you can change to better prepare for the next exam...and commit to doing them!**

- **Still feeling anxious about math?**
 - Each quarter there are workshops and a 2-credit Human Development course (H DEV 105 *Overcoming Math Anxiety*)
 - Ask your Math Teacher for advice!
 - Contact
 - Deanna Skinner in the Career and Counseling Center, 3rd Floor Parks
 - Brett Kuwada in the Career and Counseling Center, 3rd Floor Parks
 - Gina Myers, Counselor, Rainier 103