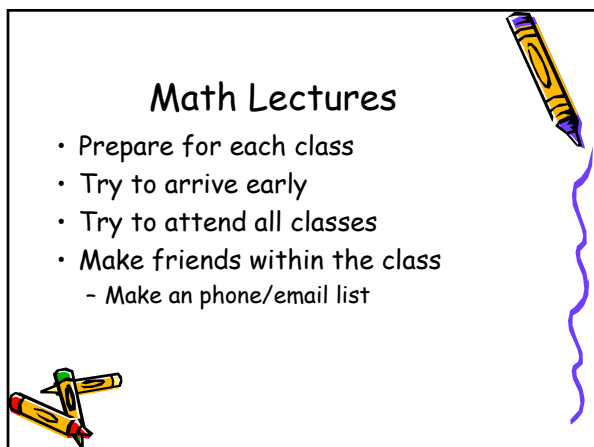


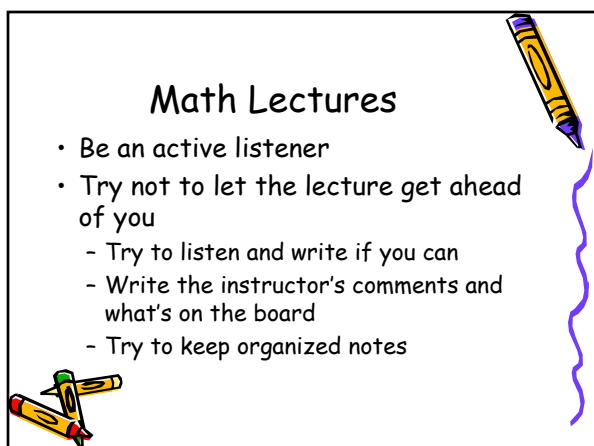
Decoding Math Problems

How to do well in Math class



Math Lectures

- Prepare for each class
- Try to arrive early
- Try to attend all classes
- Make friends within the class
 - Make an phone/email list






Math Lectures

- Be an active listener
- Try not to let the lecture get ahead of you
 - Try to listen and write if you can
 - Write the instructor's comments and what's on the board
 - Try to keep organized notes




Math Lectures

- Look for the general concept behind each problem
 - i.e. PEMDAS
- Listen for special statements (hints)
- Ask questions
- Don't tune out or shut down






Math Exams

- Don't panic
 - Use relaxation techniques
- Do the easy problems first
- Don't spend too much time on one problem
 - Pace yourself



Math Exams

- When in doubt...ask the instructor
- Show all work and put down everything you know
- Circle the answers
- When the test is returned feel free to ask your professor if you have any questions



How to get through the homework: Word Problems

- Read the problem carefully
- Know what's being asked
- Figure out what type of problem it is
 - X, /, +, -, etc.
- List any formulas that may help you with the problem



How to get through the homework: Word Problems

- Create a visual
 - This helps for those of us who don't think in numbers
 - Draw the problem or create a chart or diagram of the problem to help make it "real"
 - This works for many word problems, especially those that involve fractions and measurements



How to get through the homework: Word Problems

- Determine your X and/or Y variable(s) (if there is/are any)
 - Ex. How many marbles did Steve have left? X = # of marbles left
 - Ex. Joe has a 10% better scoring average than Rick and Rick has a 5% better scoring average than Mike. What is Joe's scoring average if Mike's scoring average is 30%? X = Rick's average and Y = Joe's average



How to get through the homework: Word Problems

- List your givens
 - Make a list of what you already know from the problem and any solutions that you have already come up with
 - This list helps you keep all of the variables and numbers from getting mixed up or lost in your mind



How to get through the homework: Word Problems

- Solve the problem
 - Now you can plug in the numbers from your list into the equation that you developed
 - If you've done the previous steps, this final step should be much easier



How to get through the homework: Equations

- Understand the symbols used in the equation
 - What do they mean?
 - Ex. $X+10$ means "some number" is being increased by 10
 - Ex. $X-(X+1)=-1$ means "some number" is being deducted by the same number plus 1



How to get through the homework: Equations

- Get the variable (X) by itself to find the answer

- Ex. $X - 12 = 10$

$$\begin{array}{c} \uparrow \quad \uparrow \\ +12 \quad +12 \\ X - 12 = 10 \\ \hline X = 22 \end{array}$$

**In this case you want to add 12 (a negative number (-n) plus the same positive number (+n) equals 0) but, generally speaking, you want to do the opposite of what's being done to the variable

**Also, remember that what is done on one side of the equation has to be done on the other side too



How to get through the homework: Equations

- Equations can look far more complicated but the goal is the same:
 - Get the variable by itself
 - If there is more than one variable then pick one and get it by itself then plug the answer back into the equation to get the value of the second variable and so on



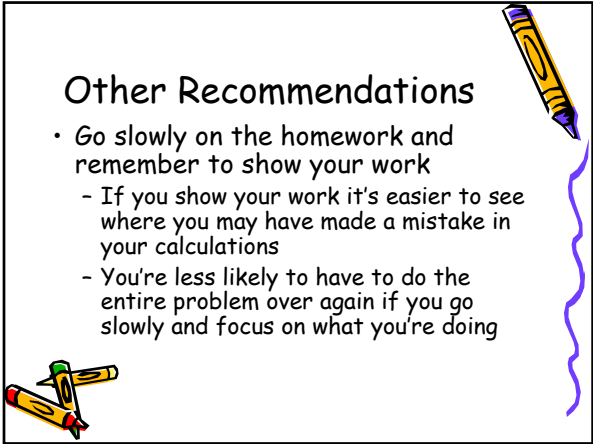
Other Recommendations

- Work with a classmate or group
 - This works especially well for sections that you may be struggling with
 - Classmates can often explain things in a way that may be easier to understand
- Ask questions
 - Don't be afraid to ask questions (even the "stupid" ones) because you may be asking the question that everyone else was thinking about but didn't have the courage to ask



Other Recommendations

- Go slowly on the homework and remember to show your work
 - If you show your work it's easier to see where you may have made a mistake in your calculations
 - You're less likely to have to do the entire problem over again if you go slowly and focus on what you're doing



Questions?

- Are there any questions?

