Strategies for Success

Study Skills for the College Math Student

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Preface to the Instructor

Many of our students arrive at their first college math class without a clue about what it takes to be successful in college. They may have no role models of successful college students in their communities. They may not be aware of the support services the college offers them. Many students are burdened with job and family responsibilities making demands on their time. Some may expect that their course grade will be based on attendance rather than performance. They may not realize that one hour spent in class usually means at least two hours work outside of class. Even if our students can do some mathematics, their weak study skills hamper their overall success.

Strategies for Success are study skills activities specific to fostering success in college mathematics. They force students to take a pro-active approach to determine specifically what they can do to become successful math students. By using *Strategies for Success*, students develop effective study skills to help them succeed in college. *Strategies for Success* take little class time and need few directions from the teacher, yet they produce big rewards in changed student behavior.

In this workbook, you will find 32 *Strategies for Success* activities. Each activity includes a "To the Instructor" page with our suggestions about when and how to use that specific activity in your class. The following suggestions address more general questions about implementation:

- **I've never taught study skills! How can I feel confident about integrating these worksheets into my curriculum?** For those of us who are used to teaching math, thinking about teaching study skills may seem uncomfortable. As with any new endeavor, start slowly. We encourage you to try just one or two activities at first. Then try to use one new activity a month, and, as you build confidence, try one a week and eventually you'll be using the activities in almost every class meeting. By rolling them in gradually, as you feel comfortable, you'll find that they will become a natural part of your teaching repertoire.

- **How do I find class time to do the *Strategies for Success* activities?** Students derive great benefit from time spent helping them develop effective study skills, yet teachers are reluctant to give up time they use 'doing the math'. We felt the same way, but recognized that our students could not master the course content without effective study skills. *Strategies for Success* activities were designed to require very little class time, and students usually 'get the point' without much teacher input. Each activity can be used in several ways—for individual work, group work, large group discussion—and so you can be creative in how you use it in

your class. We have students discuss a worksheet in small groups while we take attendance. We introduce a worksheet during the final few minutes of class and then assign it for homework. We sometimes sandwich an activity around a scheduled class break. We often plan to use an activity on no specific day, but have it ready for that day when there are few questions on the homework, or we finish more quickly than anticipated. We are confident that once you have tried a few *Strategies for Success* activities with your students, you'll see the benefit and find ways to fit them in!

- **Do students do the worksheets on their own?** Most of the *Strategies for Success* activities can be done individually or in small groups. Some can be started individually and completed in small groups, and vice versa. The "To the Instructor" page for each activity gives suggestions for how to implement it. Whether students do the activity in groups or individually, they always benefit from a teacher-led wrap-up with the whole class.

- **How do I grade the *Strategies for Success* worksheets?** In order for students to take the activities seriously, we recommend that you assign some credit to completed worksheets. We usually give homework or classwork credit. Points are awarded for thoughtful completion of the assignment, since there are no right or wrong answers. Grading the worksheets takes very little of your time; yet reading students' responses gives you valuable insights into their lives.

- **Can I modify the worksheets to meet my class needs?** Definitely! The worksheets as you see them here have evolved over several semesters of classroom use. You may want to make changes to fit your own course requirements and students' needs as well.

- **Can I split the longer worksheets into smaller parts?** Yes, many of the worksheets can easily be split. Whenever you see the symbol ⇊ at the right-hand margin, it indicates a place where we suggest a split would be appropriate.

We are happy to share our *Strategies for Success* activities with you, and eager to get feedback from you as you use them in your classes!

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Preface to the Student:

Congratulations! You are taking a college math class, one course on your path towards your educational goal. You have taken the initiative and enrolled in math, knowing that you have to succeed in this class in order to reach your dream.

Now that you are in a math class, you must do more than sit back and wish for success. Become pro-active in setting yourself up to reach your dream! Identify what successful study habits you used in your earlier school years and vow to continue using them in college. Think about some areas where you could improve and resolve to work on them. Find out what resources your college provides to help you succeed in your math class and take advantage of them.

We, the authors, have seen hundreds (thousands?) of students at different stages of their college math careers. We know that many students are unsuccessful at college math, not because they can't do the math, but due to weak study skills. We have noticed what behaviors and habits are common to successful students, and we wrote *Strategies for Success* to help you recognize and develop those habits, too.

Strategies for Success will guide you in determining specifically what you can do to become a successful math student. By using *Strategies for Success* diligently, you will develop effective study skills, which you can use in your other college classes, too. You'll see that the *Strategies for Success* activities take just a little of your time, but they produce big rewards in changed behavior.

We are honored to accompany you along this part of your educational path and wish you success in reaching your dream.

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Strategies for Success
Syllabus Search

To the Instructor:

The ideal time to do a syllabus search is the first day of class. You may want to have students get started on it while you are taking attendance. Starting group work immediately as the class begins encourages students to meet each other, and it sets a good precedent for collaborative activities you may be doing later in the term.

Since students are actively engaged as they search the syllabus for answers to the questions, they take ownership of the information. They will remember more than if they were listening passively to the instructor reading the syllabus.

The Syllabus Search can be modified to fit the exact course requirements as described in your syllabus.

The Syllabus Search is designed to be used two different ways:

- Copy it all as a two-sided document for use on one day.
- Use the three pieces (General Information, Course Grading Policy, Resources for this Course) separately on three different days.

Strategies for Success
Syllabus Search **Name**_____

- **General Information**

1) My instructor's name is _____

2) I can contact my instructor by Phone: _____

Email:_____

3) My instructor's office is located in _____

4) My instructor's office hours are _____

5) Matching my schedule with my instructor's office hours, the times that I will be able to meet with my instructor are _____

6) The website address for this class is _____

7) The required textbook for this class is titled _____

and I can buy it on campus at _____

8) For this class I need a (circle one) scientific/graphing calculator such as a _____

9) Other materials I need are_____

10) The attendance policy is _____

_____

11) The cheating policy is _____

_____

12) If my cell phone goes off in class, I _____

- **Course Grading Policy**

13) I plan to earn a(n) A/B/C_____ in this course.

14) The **grading scale** will be: A=_____B=_____C=_____D=_____F=_____

15) My course grade will be based on my scores on:

___	homework	___	classwork
___	quizzes	___	participation
___	tests	___	other: _____
___	final examination		_____

16) When is **homework** due? _____ How do you turn it in? _____

17) Is late homework accepted? _____ If so, is there a penalty? _____

18) Each homework assignment is worth _____ points and all homework is worth _____ points total for the course.

19) There will/will not (circle one) be **quizzes** in this class. If so, each quiz is worth _____ points and all quizzes are worth ____ points total for the course.

20) This class has _____**tests** that are scheduled on _____

21) Each test is worth _____points and all tests together contribute _____ points towards my course grade.

22) The **makeup test** policy is _____

23) The **Final Exam** is scheduled on _____and is worth _____points.

24) Other work that will contribute to my grade: _____

25) Questions for my instructor about the grading policies:

- **Resources for this Course**

26) If I need help in this course, I can use the following resources:

1. _____

2. _____

3. _____

4. _____

27) If I need a tutor for this course, I can call _____
or go to_____

28) If I need accommodation due to a disability I need to _____
_____

29) If I need to contact a classmate from this class I would call or email

1. _____phone: _____email:_____

2. _____phone: _____email:_____

3. _____phone: _____email:_____

30) A good time for me to meet with a study group is_____↵

Strategies for Success
Notebook Preparation

To the Instructor:

Many instructors assume their students know how to be organized and set up a notebook. This is not always the case. Students often don't realize that being organized can help them be successful in college. Having a system to organize a notebook has made a big difference for many students – some cite it as the most important thing they learned in this class!

One approach to this activity is to introduce it on the first day so that students will know what supplies they need. Set a date, ideally no later than the first test, for students to show their notebooks to the instructor. You may want to award some point value to a properly prepared notebook.

As each instructor has a unique approach to being organized, this activity may easily be modified.

Strategies for Success

Notebook Preparation **Name**_____

Good organization is a study skill that is essential for success in mathematics. Some people seem to be naturally organized, while other people are not. But it is possible to learn to be organized. Preparing a math notebook is a good way to develop this important skill.

1) You will **need**:
   - a **three-ring binder** (with rings at least 1“ in diameter)
   - **7 dividers**
   - **notebook paper** and **graph paper**
   - **a hole-puncher** (most useful if it fits right in your binder)

2) To **prepare** your notebook, **label** the tabs for your dividers:
   - Course information
   - Notes
   - Assignments
   - Tests
   - Vocabulary
   - Paper
   - Graph paper

3) To **assemble** your notebook,
   - put the dividers into the notebook.
   - file your papers into the proper section.

When you have **finished**, have your instructor sign you off below.

Date: _____ Instructor: _____

Strategies for Success
Reading the Textbook

To the Instructor:

Are you surprised at how few of your students read the textbook? Most teachers expect their students to read the course textbook and then express frustration when it becomes apparent that only a few students actually do read the text. Yet students may never have learned how to read a college textbook. Reading a textbook takes a different set of skills than leisure reading, and reading a math textbook requires its own set of behaviors. Students benefit when textbook reading is addressed explicitly in class.

There are two parts to this activity:

- Part I is a checklist of effective reading behaviors.
- Part II is a detailed guide to reading the first two pages of one section of the text.

In Part I, students are asked to reflect on their own behaviors when reading their math text. Underlining the text or putting question marks in the margins are habits many students have never tried, or avoid in hopes of re-selling their books at the end of the term, and they are surprised to hear that such student annotations are common in the used book market. After completing the checklist, students are asked to identify which behaviors they will try next.

Part I takes very little time, and can be followed by a brief class discussion of 'surprises'--effective reading behaviors that students had been previously unaware of. This is a good time for the instructor to reinforce the benefit of making all the behaviors in the checklist habits.

Part II guides the students through one section of the textbook, pointing out the various features (for example, objectives, examples, Quick Checks, diagrams, etc.) and asking what purpose they serve so that students will see how the book is designed to support their learning. Students are asked to list any words they don't understand and to identify where they can find their definitions. Having students re-state exercise directions and explanations of math steps in their own words is a good way for them to cement the ideas and for you to assess their understanding. Students compare and contrast the Quick Checks to the worked example and, after doing the Quick Checks, they assess their preparation to do the homework exercises.

For Part II, be sure to choose a section with a good amount of narrative and at least one example in the first two pages. All students should use their own textbook. The activity may be done individually outside of class or with partners in class. In either case, it is a good idea to work up

through #3 as a whole class, with the instructor modeling active reading behavior of the first paragraph of the section while the students read along in their texts.

The two parts of this activity may be done together or separately. In order for students to derive the greatest benefit from this activity, it should be done fairly early in the term.

Strategies for Success

Reading the Textbook - Part I **Name_____**

Have you ever thought about how you read a math textbook? It's different from reading a novel or a magazine. Most people don't read math textbooks for relaxation or entertainment! They read math textbooks to learn how to do math. The book speaks to you, like a teacher does in class, showing and explaining how to do math.

1) The table below lists some behaviors that may help you read your math book effectively. Think about how you usually read your math book. Then check the appropriate column next to each behavior.

When I read my math book, …	Yes	No, but I know I should	No, I never thought of it
a) I sit with an alert, but comfortable, posture.			
b) I am prepared to do some math--I have a pencil in my hand. If I cannot write in my textbook, I have some paper, too.			
c) I read every single word.			
d) I look at all diagrams, graphs, and pictures carefully.			
e) I underline important words and ideas.			
f) I work each step of the examples on paper.			
g) I make sure I understand all the math steps. If I don't understand how one step follows the step before, I put a question mark and get help as soon as possible.			

2) Did you check 'Yes' for all the behaviors? _____ If not, which one(s) will you try next?

Strategies for Success

Reading the Textbook - Part II **Name_____**

In this activity you will practice reading your math book effectively.

Read the first two pages of section _____ and then answer the following questions:

1) What is the title of the section?

2) Find the section objectives.

(a) What are the section objectives?

(b) Why are they listed at the start of the section?

3) Read the first paragraph.

(a) What does the first paragraph tell you?

(b) List any words you don't understand:

4) Continue reading the first page.

(a) List any words you don't understand:

(b) What can you do to find out what they mean?

5) Look for pictures, graphs, or diagrams.

(a) Are there any pictures, graphs, or diagrams? ____yes ____no

(b) What purpose do they serve?

6) Continue reading until you get to Example 1.
   (a) What is Example 1 titled?
   (b) How does the title relate to the section objectives?
   (c) What do the directions say?
   (d) Restate the directions in your own words.
   (e) Copy all the math steps in Example 1 into the table below. To the right of each line, use your own words to explain what math you did in that step. If you do not understand how one step follows the line before, try to pinpoint exactly what you don't understand and write it down next to that step. How can you get help to understand that step?

Copy the math steps in Example 1	Explain the math in your own words

7) Now look at the Exercises at the end of this section.
   (a) Which Exercises are like Example 1?
   (b) Do you feel ready to work those exercises? ____yes ____no Why or why not?

Strategies for Success
Math Autobiography

To the Instructor:

Many students come to college math courses with negative past experiences. These experiences may have contributed to the negative thoughts, lack of confidence, and anxiety that students bring to class. By reflecting on the past and identifying some of the negative experiences, students can begin to move beyond them and focus on making a new beginning with math. Then, by acknowledging their strengths, they can better realize that they have some positive qualities that will help them as they move forward.

This exercise is best done early in the term. It was designed to be done individually. Reading your students' math autobiographies will give you valuable insights into their lives and experiences!

Strategies for Success

Math Autobiography **Name**_____

We all arrived in this class by different paths. Each of us has had many experiences that have influenced our attitudes and beliefs about math and our abilities in math. This exercise will help you reflect on the past and begin to focus on the future.

1) Write your math autobiography—your life story with math. In your autobiography you should:
   (a) discuss your present attitude about math.
   (b) relate any specific experiences you have had that may have influenced your attitude about math. Think back to your earliest memories and then trace your story forward to today. (These may or may not be experiences in school.)
   (c) discuss your fears and concerns about this course.
   (d) describe your strengths and relate how they will help you as you progress through this course.

Strategies for Success
On Time and Ready to Go!

To the Instructor:

Many students beginning developmental math courses have never thought about what it takes to be successful in college. They may have passively coasted through their previous educational experiences. The idea that **planning** is necessary for them to get to class on time, fully prepared and with the necessary materials, may not yet have entered their consciousness. By focusing students on this idea, they may begin to practice some of the behaviors that will help them succeed.

Using this as a group exercise brings to light the creative solutions and good behaviors of some of the students in class, and it contributes to building a community of learners as well.

This activity is best used early in the term to encourage good practices from the start of the course. You may want each student to complete a worksheet individually and then discuss their responses in a small group setting. Or you may prefer your students to get into small groups from the start and collectively brainstorm. It is helpful for you to lead a wrap-up or summary with the class as a whole at the end.

Strategies for Success

On Time and Ready to Go! **Name_____**

1) My math class meets on_____ from _____to _____.

2) To be in class on time regularly I have to:
   1.
   2.
   3.

3) How should I adjust my schedule to get to class on time?

4) Every class day I have to bring the following tools:
   1.
   2.
   3.

5) What do I have to do to be sure I have these tools every day in class?

↵

6) In order to be ready for the next session of this class, I have to:
   1.
   2.
   3.

7) If I need help with the course material, I will:
   1.
   2.
   3.

8) To devote enough time to succeed in this class, I will make these adjustments to my life:
   1.
   2.
   3.

↵

Strategies for Success
Test Preparation Skills

To the Instructor:

Developmental math students often show up at a test with no preparation and then are surprised and disappointed at their results. Many of them have never been taught how to prepare for a test. They are not aware of the importance of having an organized study plan the days leading up to a test. Some students think it is the teacher's responsibility to structure a review rather than their own responsibility to identify their strengths and weaknesses and make their own personal review plan.

This short worksheet gives students a way to start planning their test preparation. By becoming aware of successful strategies and analyzing their own previous test preparation habits, students can begin to formulate their personal plans for test preparation. You may want to customize the worksheet to include specific strategies you want your students to use to prepare for your tests.

This activity has quite a bit of reading (the first page) and requires some personal analysis, so it is best done individually. After each student has completed an individual analysis, a brief small group and/or whole class discussion may be helpful.

This activity is part of a five-part testing suite:

- **Test Preparation Skills**
- Test Stress Reduction
- Test Taking Skills
- Post Test Check up
- Test Analysis

Strategies for Success

Test Preparation Skills **Name**_____

How do you prepare for a test? Have you ever just 'shown up' for a test and then were disappointed by the results?

Successful test preparation requires a strategy and a plan. If you make a plan and carry it out, not only will you be better prepared, but also you will feel more confident and less anxious about the test.

Strategies for careful test preparation

- **Start your test preparation early**, at least several days before the test. Successful test prep involves several steps and you need sufficient time to complete each one.
- Check that you have **completed every homework assignment** that the test will cover. Not completing every assignment causes holes in your body of knowledge.
- Check that **every problem is understood and done with integrity**. Integrity means that you did not copy from the student solution manual or another student and that you re-did any problems for which you got help to guarantee that you can do them yourself!
- **Review your class notes**. Pay particular attention to areas you had marked for further study.
- **Review the Chapter Summary** in your textbook to make sure you understand all the key concepts. Go back to any section where you need more practice and work some of the exercises.
- Go to each section and **reread the section objectives**. For each objective, **choose a representative problem** that best typifies this objective. Write this problem on a 3x5 card, being sure to list the section and problem number where you found it. Write the answer on the back of the card. Put the 3x5 cards together to create your own practice test.
- Work the **practice test** you created. Check your answers with those on the backs of the cards. Go back and review the objectives of any you got wrong.
- **Work out the Chapter Review and/or the Chapter Test**. Do this in a 'test' setting, if possible.
- **Use all available resources** to get help on topics you did not understand.

1) Use this checklist to analyze how you prepared for your last test and to design a strategy to prepare for your next test!

Strategy	My prep for last test	Will do before next test
a) Test prep started several days before the test		
b) Every homework assignment completed		
c) Every problem understood		
d) Every problem completed with integrity		
e) Class notes reviewed		
f) Chapter Summary reviewed		
g) One problem chosen for each objective		
h) My Practice Test worked		
i) Chapter Review/ Chapter Test worked		
j) Resources for help used		

2) To be better prepared for the next test I plan to (choose one):

_____ continue what I've been doing

_____ make a few changes to my test prep strategies

_____ make major changes to my test prep strategies

3) List the resources available to you to support your test preparation:

Strategies for Success
Test Stress Reduction

To the Instructor:

Student anxiety in a test situation is often caused by sensing a lack of control. Once the anxiety forms and builds, students may panic, feel overwhelmed, and either 'freeze up' or give up. Few students see the connection between their prior actions and test anxiety. Making students aware that taking control of their preparation helps build their confidence and reduce stress is a worthwhile activity.

This activity does not take very long and need not be done in class. It requires personal reflection and so each student should fill in the worksheet individually. After each student has completed an individual analysis and action plan, a brief-group and/or whole class discussion is a good way to have them benefit from the ideas of their classmates.

This activity is part of a five-part testing suite:

- Test Preparation Skills
- **Test Stress Reduction**
- Test Taking Skills
- Post Test Check up
- Test Analysis

Strategies for Success

Test Stress Reduction **Name_____**

You can reduce your test stress by **taking control** of your success with some strategies that are easy to incorporate into your test prep routine.

- **Take control by being prepared mathematically.**

  Prepare yourself mathematically for the test so you will have confidence in your ability to succeed. If you feel prepared and confident, you will believe you can do well. These positive thoughts will carry over to your actions on the test. Lack of preparation causes students to be nervous, 'blank out', get discouraged, and be overwhelmed. **Follow the Test Preparation Skills strategies** for preparing for the test.

  1) To be prepared mathematically I will:

  ⌟

- **Take control by taking care of your body.**
  - Maintain your **exercise routine**. Exercise helps reduce stress and improves circulation to all of your body, including your brain.
  - Get a **good night's sleep.** Your body becomes refreshed as you sleep. Rest will help you think more clearly during the test. You will not do your best if you stay up all night cramming.
  - **Eat properly and maintain good nutrition**. Keep your body strong to better handle the stress of a test.
  - **Dress for your success.** Dress in a way that makes you feel confident and comfortable. Some students like to dress up a bit for tests and others prefer to wear their favorite jeans. Choose what works for you!

  2) To take care of my body I will:

  ⌟

- **Take control by planning ahead.**
  - **Plan your transportation** so that you arrive early and relaxed.
  - Make sure that you have all the **required materials** packed and ready to go.
    - Pencils/erasers/highlighter
    - Calculator
    - Scantron /Blue Book or other materials required by your teacher
    - Any assignment that you need to turn in
  - Pack **personal items** that add to your comfort such as tissues, water, a jacket or sweatshirt.

  3) To plan ahead I will:

  ⌟

Strategies for Success
Test Taking Skills

To the Instructor:

Many students do not have an effective test-taking strategy. They simply start with the first problem, continue in the order the problems appear, and hope for the best. This approach is not empowering. By helping students become aware of effective strategies for tackling a test, they gain some control and thus reduce anxiety and build confidence. The strategies themselves can improve test scores and so the benefits of this exercise will be apparent.

This activity requires some self-evaluation, so it is best done individually. Follow-up discussion in class will reinforce these strategies. It is fun to watch students' faces when they realize that strategies they had never considered can help them earn higher test scores!

This activity is part of a five-part testing suite:

- Test Preparation Skills
- Test Stress Reduction
- **Test Taking Skills**
- Post Test Check up
- Test Analysis

Strategies for Success

Test Taking Skills **Name**_____

1) **For each statement below, check Always, Sometimes, or Never**

A	S	N	
			Before the test
___	___	___	I arrive on time or even early so I feel calm and ready.
___	___	___	I set out the required materials so I feel prepared.
___	___	___	If a problem in the rest of my life may interfere with my test performance, I write it down on a card and put it away until after the test.
___	___	___	I ignore others in the room so I won't pick up their negativity or anxiety. I am prepared and confident.
___	___	___	I check my inner voice. I turn any negative thoughts into positive statements. "I am prepared; I've done what I can; I am ready to succeed; I can do math!"
___	___	___	I use the restroom. Most teachers do not allow exit/re-entry during the test.
___	___	___	
			Taking the test
___	___	___	I do a "data dump" as soon as I get the test. Then I no longer need to think about remembering the facts/formulas.
___	___	___	I scan the test, reading all problems before I begin any work.
___	___	___	I read directions carefully. I circle, underline or highlight key words and directions.
___	___	___	I note easy problems and do them first to build my confidence and ensure those points.
___	___	___	If I can't do a problem immediately, I write down anything I can think of such as formulas, pictures, etc., then I move on and return to it later. The solution may come to me as I work on the other problems.
___	___	___	If I do not know how to do something, I try to relate it to something I do know.
___	___	___	I show all my work. I write all steps, reasoning, and supporting evidence. This is really helpful if my teacher awards partial credit.
___	___	___	I check my work.
___	___	___	I check answers. I make sure word problems have reasonable answers.
___	___	___	I ignore others. I remember that those done early may be turning in blank tests.
___	___	___	I pace myself.
___	___	___	I do not turn in my test early. I use the time to carefully go over my work.
___	___	___	

A S N

Reducing stress during the test

___ ___ ___ I check my inner voice. I turn any negative thoughts into positive statements.

___ ___ ___ I imagine and visualize that I am in my favorite pleasant relaxing situation.

___ ___ ___ I take mental breaks.

___ ___ ___ I do stress reducing exercises.

___ ___ ___ I do deep breathing.

___ ___ ___ I do muscle tensing and relaxing.

___ ___ ___

Look at your checklist.

2) Can you think of any techniques that you use regularly that are not on the checklist? Add them to the checklist.

3) Look at your checks in the 'Sometimes' and 'Never' columns. List three techniques that you will try during the next test.

1.

2.

3.

Strategies for Success
Post Test Check up

To the Instructor:

Time and again, when students get tests back, they merely look at the grade on the first page and then shove the tests in their backpacks, never to be seen again. They forfeit a valuable opportunity to evaluate their study skills and just continue using their usual habits without considering whether or not they help them succeed in the course. This activity is designed to have students reflect on their study and test preparation skills and to move them towards taking responsibility for their performance on each test and, ultimately, in the course.

Having students correct each and every error on their tests is an important activity that will fill in gaps in their knowledge. It will help them progress through the course and prepare for the Final Exam. Collecting test corrections and awarding points for them guarantees that students fully complete this important follow-up activity.

This activity is best done individually right after a test has been returned. It may be done either in class or as homework. The worksheet encourages self-reflection and self-evaluation.

This activity is part of a five-part testing suite:

- Test Preparation Skills
- Test Stress Reduction
- Test Taking Skills
- **Post Test Check up**
- Test Analysis

Strategies for Success

Post Test Check up **Name_____**

I just got my test back and I should evaluate my performance.

1) I attended every class since the last test. Yes_____ No_____

2) I am satisfied with the quality of my lecture notes. Yes_____ No_____

3) I used the following test prep strategies:

Strategy	Yes	No
a) Test prep started several days before the test		
b) Every homework assignment completed		
c) Every problem understood		
d) Every problem completed with integrity		
e) Class notes reviewed		
f) Chapter Summary reviewed		
g) One problem chosen for each objective		
h) My Practice Test worked		
i) Chapter Review/Chapter Test worked		
j) Resources for help used		

4) I also prepared for the test by…

5) Fill in the part of the table that applies to how you feel about your grade on the last test.

I am happy **OR** **I am unhappy** with the grade I earned on this test	
The study skills and strategies that worked for me and that I plan to continue are….	In order to do better on my next test, I need to change…
The area that I need to improve is…	I will effect this change by…
	The study skills and strategies that worked for me and that I plan to continue are….

6) Fill in the table below to commit to completing the loop on this assessment process :

I will	**Yes**	**No**
a) correct every problem that I missed on the test.		
b) make sure I can do each problem on my own and understand it completely. • This will fill in my gaps in the knowledge tested and help me as I progress through the course. • This will also help prepare me for the Final Exam.		
c) rework, on a separate sheet of paper, all the problems where I missed even one point. Then I will staple that paper with all the corrections to the test. This will give me a good Final Exam Study Guide for this unit.		

Strategies for Success
Test Analysis

To the Instructor:

Many students do not realize that tests can be learning experiences as well as assessment instruments. They may feel they are done with a test the minute they turn it in. They fail to take advantage of the benefits of analyzing their test performance when they receive a graded test. They may never have thought about what led to their score on that test or what they could do to improve their grade on the next test.

The first page of this worksheet describes three of the most common types of errors students make on tests – being unprepared, concept errors, and careless errors. Discuss these three types of errors with your students and then have them make a chart like the one shown. (It may be easier to have them copy it onto notebook paper so they can have a line for each problem on the test.) Clarify that they are to put the number of **missed points** in the appropriate column. Let them proceed through the worksheet and analyze their own errors. Keep in mind that the same error may be classified differently from one test to another, depending on the test content. For example, making a sign error would be a concept error on a test covering operations with signed numbers but might be a careless error when testing linear equations.

Often this is an eye-opening exercise in self-awareness. It may be helpful to follow it up with a personal conversation with each student, particularly after the first test.

This activity is part of a five-part testing suite:

- Test Preparation Skills
- Test Stress Reduction
- Test Taking Skills
- Post Test Check up
- **Test Analysis**

Strategies for Success

Test Analysis **Name_____**

There is a lot you can learn about yourself, your study habits, and your test-taking skills by examining your graded test. Did you do as well as you thought you could? Or is there room for improvement? You may think, "the test was just too hard" or "the teacher didn't give us enough time", but, chances are, your instructor has been giving a similar test under similar conditions to many students before you. So let's see what **you** can do to earn a higher score on your next test.

Look at your graded test and analyze whether each point loss was due to your having been **unprepared** for that problem, a **concept error,** or a **careless error.**

- Being **unprepared** for a problem means you didn't know how to do the problem because you hadn't done the homework that would have prepared you for it.
- A **concept error** is one where you really didn't understand the concept behind the problem. No matter how much time was available for a problem like this, you wouldn't have been able to do it because you didn't know how to approach it.
- A **careless error** is one where you understood the problem and knew how to solve it, but you made a mistake that could have been avoided. Maybe you copied the problem or your handwriting incorrectly, made a relatively minor mistake in calculation, or some similar error.

1) On a separate piece of paper, make a chart like the one below with one line for each problem on the test. Put the **number of points you missed** on each problem under the correct heading and then find the total in each column.

Problem	unprepared	concept error	careless error
1			
2			
3			
4			
5			
6			
7			
…			
	Total points	Total points	Total points

2) In which column did you have the most missed points?

3) What does this tell you about yourself?

4) What can you learn from this exercise?

Being Unprepared

Consider the points lost because you were **unprepared.**

Why did you take the test without being fully prepared? Oftentimes, activities and responsibilities in life interfere with good intentions about being diligent in attending class, reading the textbook, and doing all the assignments. It may be time to:

- **re-examine your weekly schedule** and make sure you are devoting a sufficient amount of time to this class. Lay out a time management grid of your schedule making sure to schedule your math study time.
- **re-commit yourself to succeeding in this class.** Think about your college and career goals and remind yourself of how this course helps you get one step closer to achieving them.

5) List two steps you will take to remedy being unprepared**.**

1.

2.

Concept Errors

Now consider the **concept error** point loss.

A high total in this column tells you that you didn't understand the concepts very well. As you do your work day-to-day you might think you "get it", but you don't always make sure that you completely understand each problem in the homework. You may understand a math concept for the two hours you're working on the homework problems, but forget it by the next day.

- **Review earlier sections**. Spend some of your homework time reviewing earlier sections, instead of saving all the review for test time.
- **Get the help you need immediately!** Math concepts build on each other. Each new idea is based on many previous concepts. Make sure you get the help you need immediately, as soon as you find yourself beginning to feel lost, so that the confusion doesn't compound itself – otherwise it can become like a snowball, getting bigger and bigger as it rolls through the snow.

If your total loss due to concept errors is fairly large, find out where you can get the help you need. Your school has places available just for you to get help with your math.

6) List two places you can go to get help with your math:

1.

2.

A high concept error total is cause for concern and must be addressed immediately to guarantee success!

Careless Errors

Next, look at the **careless error** point loss.

Careless errors are often caused by hurrying during a test or by lack of concentration due to test anxiety or over-confidence. So here are some strategies that have worked for other math students:

- **Do the easiest problems first.** When you first start on a test, look it over from beginning to end and note which problems will be easiest for you. Do all those problems first, to ensure that you don't leave an easy problem blank, just because it is at the end of the test. Finishing the problems you find easy will help build your confidence! Then go through the rest of the test from beginning to end.
- **Work carefully and neatly**. As you do each problem try to focus on one step at a time.
- **Review each problem to look for careless errors**, when you finish the test. Find and correct common careless errors like arithmetic mistakes and sign errors before you turn in your test.
- Whenever possible **check the problem**.

A lot of points can be gained by slowing down and being careful!

7) What are two things you will do next time to prevent careless errors?
   1.

   2.

8) Now take half of your "careless" points and add them back to your test total.
   (a) What could your test grade have been? _____

   (b) Would that have changed your A/B/C grade? _____

Strategies for Success
Successful Student Behavior

To the Instructor:

Many students beginning developmental math courses exhibit immature classroom behavior and study habits. They may have never thought about what type of behavior is expected in college or what habits contribute to success in college courses. Students may think of themselves primarily in their roles outside of the classroom--athlete, employee, parent, etc.--and have no image of themselves as students. By identifying a role model and thinking about what constitute successful student behaviors, they can begin to see themselves taking on this role. Using this as a group activity helps students see themselves as part of a community of learners who will help and support each other through the course.

This activity is best done early in the term, ideally within the first couple of weeks. It encourages good practices from the start of the course. Students should be given time to complete the worksheet individually and then form small groups to discuss the behaviors they identify. You could then have each group list some of their successful student behaviors on the board and have the class identify commonalities among the groups.

Strategies for Success

Successful Student Behavior **Name_____**

Group Members:_____

Each group member will fill out a worksheet and turn it in.

Being successful in a math class is about more than the math. Successful students often exhibit similar behaviors. Do you see yourself as a successful student? Do you practice the behaviors of successful students?

1) Name the person who you see as the best role model of a student. Why is this person a role model to you?

2) What are some behaviors you think a successful student should exhibit?
List 4 of them here.
   1.
   2.
   3.
   4.

3) From this list, which do you already do on a regular basis?

4) Which behavior do you think you could try next?

Strategies for Success
Textbook Tour

To the Instructor:

Math instructors usually consider many factors when choosing a textbook for their courses. They may look at the narrative, examples, exercise sets, definitions, chapter reviews, etc., as well as the overall readability of the text. But many students open their textbooks only to find their assigned homework exercises. They fail to appreciate the many features that are designed to support their learning, those very features that may have caused their instructor to select that book.

This exercise provides an opportunity for students to familiarize themselves with the features of their textbook. Students are given a list of ten features common to most textbooks. They match each feature with its purpose. The descriptions of the features provide subtle messages that promote good study habits, such as "Lists answers to the exercises *so I can check my work and correct my mistakes*." Students are then asked to list other features unique to their textbooks and state their purpose.

This activity is best done individually or in a small group. To be most effective, it should be done early in the course, but after the first chapter has been completed.

Strategies for Success

Textbook Tour **Name**_____

By now, you are a few weeks into your math course. Are you familiar with all the features of your textbook?

1) Match each feature with its purpose.

Textbook feature	Purpose
___ 1. Preface	(a) Lists answers to the exercises so I can check my work and correct my mistakes
___ 2. Objectives	(b) Exercises I work so that I practice and master a concept
___ 3. Example	(c) Summarizes the steps of a certain procedure
___ 4. Procedure box	(d) Explains and shows me how to work a specific type of problem
___ 5. Definition box	(e) Helps me review the chapter by summarizing key concepts and terms, and practicing typical exercises of each section
___ 6. Margin note	(f) A sample test I can use to assess my readiness for my class exam
___ 7. Exercises	(g) Lists topics I will learn and master in this section
___ 8. Chapter Review	(h) Gives me the meaning of an important term or concept
___ 9. Practice Test	(i) Gives me tips and cautions me about common mistakes
___ 10. Answers to Exercises	(j) Explains the author's philosophy and introduces features of the book

2) List any other features of your textbook and identify the purpose of each:

Textbook feature	Purpose

Strategies for Success
Time Management

To the Instructor:

College students have many demands on their time. They may be taking several classes, working at a part-time job, and enjoying an active social life. While they know their class and work schedule, it is not uncommon for them not to plan any specific study time. Studying is low on their priority list and takes place after everything else is finished, if at all. Some students are repeatedly surprised that their next class has arrived before they 'had time' to do the assignment.

This activity guides students through the creation of a weekly time schedule. On it, they include their classes, job, personal and family responsibilities. Then they are asked to schedule two hours of study time for every hour of classtime. After study time is committed to paper, they can fill in time for relaxing, friends, etc.

Students derive many benefits from creating and reflecting on their weekly time schedules. They realize how many hours they need to commit to each class. They are forced to think about when and where they will study. By looking at possible 'empty' time slots between classes, they may utilize their time on campus more effectively. Keeping the schedule handy will enable them to make appointments with tutors, counselors, doctors, etc., without conflicting with their classes. And any study time not needed one day becomes a bonus free time slot!

Some students may find they are overscheduled. Looking at their packed schedules, they realize why they are constantly feeling stressed. If that is the case, the worksheet asks them if there are any adjustments they can make to their schedules. They may realize that in order to achieve any success this term, they may need to drop a class or work fewer hours.

This activity is designed to be done individually, but a brief wrap-up discussion with the whole class is helpful to generate ideas for what to do about being overscheduled. To reap maximum benefit, it should be done fairly early in the term.

Strategies for Success

Time Management **Name_____**

Have you ever heard the saying "If you want something done, ask a busy person to do it"? People who have many demands on their schedule and manage to accomplish a lot are usually very organized. They use their time wisely. Time management is a skill you can learn, and it will help you become a more successful student.

A weekly schedule showing all your regular activities is a useful tool to help you manage your time and commitments. Once you create your schedule on paper, you'll be able to look at it, know that all your commitments are accounted for, and see what times are available for other things. Then you can easily match your free hours to your instructors' office hours, plan study group sessions, and set up regular meetings with a tutor. You can see when you can schedule things that occasionally come up, like counseling and doctor's appointments. And you can see how much time you have for fun activities.

Start by making a chart showing all 168 hours of the week – that's 24 hours per day for 7 days. You may want to use the one on the next page, or make one like it on a separate piece of paper.

1) First show all the classes you are taking this term, making sure to block out the number of hours for each class meeting. Also show the time it takes you to get to school and return home.

2) Many students work at jobs, in addition to taking classes. Do you have a job? If so, mark your typical weekly job schedule in the chart. Don't forget to include commuting time!

3) Now think about what activities you do every day, other than school and work. Your basic needs like sleeping, eating, bathing, exercising, etc. all take time. If you are responsible for cooking meals for your family or caring for young children, you know those tasks take time, too. Show all your usual daily activities in the chart.

4) Where does your study time fit in? The guideline for college students to do all the reading, homework, and studying required for their classes is to count 2 hours outside of class for each hour in class. For each of your courses, multiply the total number of hours each week you are in class by 2, then block out and label that many hours for studying for that course on your weekly chart. Try to schedule as many hours as possible in your college's math center and library, where you will find help nearby if you need it. Keep in mind that it is more effective to study in several small sessions instead of a couple of 'marathon' sessions.

5) Last, you may schedule time for spending with friends, going out, relaxing, leisure reading, playing video games, or watching tv.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 am							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11am							
noon							
1 pm							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11 pm							
12 am							

6) (a) Do you have spare time, or are you 'overscheduled'?

(b) Is this a feasible schedule for you? Will you be able to meet all your commitments without overstressing?

(c) What changes can you make to your schedule to make it work better for you?

Strategies for Success
Homework Skills

To the Instructor:

As teachers, we are often frustrated by the attitudes students have toward their homework. Many students have never thought about the purpose of homework or considered that there may be benefits to doing homework. They only vaguely know when homework is due and in what format it is expected. Students seldom exhibit pride in the homework that they turn in to their teacher.

As far as their grade is concerned, students don't usually think about the point value of each assignment and rarely consider how missing one or more assignments can impact their course grade. If they are aware of the point value, too often they just do their homework to get those points, with little concern for understanding what they are supposed to be learning. Many students see nothing wrong with copying answers from the back of the book or from another student just to have a paper to hand in.

In this activity students reflect on the issues of homework in a way that will help them develop responsibility for their own learning.

This activity is divided into three parts:

- Why do Homework?
- Doing Homework
- Homework Grading Policy

You may choose to assign this activity as three separate parts, or as one worksheet altogether. This activity works best as a group exercise, although you may want students to complete the first section, Why do Homework, outside of class. The second section, Doing Homework, should be done in class, since it requires students to exchange homework papers with their classmates. Allow enough time for discussion in the groups to develop and then bring the class together as a whole to summarize the results.

Students often are surprised at the ideas of their classmates. This activity is quick to do, and yet is powerful in a rather subtle way.

Strategies for Success

Homework Skills **Name**_____

Why do homework?

1) Why do math teachers assign homework?

2) Who benefits when you do homework?

3) How does practice help you improve a skill?

4) What are the advantages of doing homework?

5) What are the disadvantages of not doing homework?

6) How can your graded homework be useful to you?

Doing Homework

Work with a partner or small group of classmates. Trade your last math homework paper with someone in your group.

7) Look at your classmate's homework paper:

list 3 good things you notice	list 3 things that could be improved
1.	1.
2.	2.
3.	3.

8) Share your results with your group. Is there one common area in which you all could improve?

Answer each of the following questions individually and then discuss your answers with your group members.

9) When do you usually do your math homework?

10) Where do you usually do your math homework?

11) What is going on around you when you do your math homework?

12) What would be the best environment for you to do your homework?

13) What do you do if you get stuck on a homework problem?

14) When you finish a homework assignment, what does the paper look like?

15) How do you feel when you finish a homework assignment?

16) This table lists several practices that students use when doing math homework. Check the practices that you usually do. In the next column, check the practice that will help you succeed in this class.

Homework Practice	I usually do	Will help me succeed!
a) Do homework where there is help available		
b) Write name on top of paper		
c) List assignment at top of page		
d) Identify each problem by number		
e) Keep problems in order on paper		
f) Write neatly and legibly		
g) Show all work-not just answers		
h) Refer to similar examples in text		
i) Check answers in back of book		
j) Attempt to correct wrong answers		
k) Highlight problems on which I need extra help		
l) Redo a problem on my own, if I received help with it		
m) Save homework to review before test		
n) Feel proud of my work		

Homework grading policy

17) How much of your course grade is based on homework?

18) How often is your homework assigned?

19) When is your homework due?

20) How much does each assignment count toward your homework total?

21) Does your teacher require you to do your homework in a specific format? If so, what is it?

22) Where do you turn in your homework?

23) Describe the scoring system used by your teacher to evaluate your homework.

24) Will your teacher accept late homework? Is there a penalty?

Strategies for Success
Mid-term Check-up

To the Instructor:

Mid-term is a good time for students to reflect on their study habits and grades. There are still plenty of opportunities to improve course grades by making positive behavioral changes. But students often continue their same habits without considering whether or not these habits are helping them succeed in the course, even after they are informed of their midterm grade.

This activity helps students reflect on their study skills and take responsibility for their outcome in the course.

The worksheet can be assigned as homework or used in class. If done in class, allow enough time for students to think quietly. Emphasize to students that the answers are for their own benefit and positive results will result only from honest self-evaluation.

Allow some time for a whole class discussion or wrap-up. If the goal of a large portion of the class is merely to pass the course, it would be helpful to remind them of the sequential nature of mathematics and how success in subsequent courses depends on having a solid foundation. It can be particularly effective to take one or two items from the second page, such as the number of absences or the number of times per week homework is done, categorize responses by midterm grades, and present the tallies to your class.

The worksheet can be modified to meet the needs of your course. You may assign both pages at once or separate them into two.

Strategies for Success

Mid-term Check-up Part I **Name_____**

1) My goal is to have a grade of _____ for my final course grade.

2) My grade in this class right now is _____.

3) I feel proud / ok / disappointed with my class grade, because
(circle one)

4) The one study skill that has helped me most so far was _____, because

5) Two other study skills I used that have also been helpful were

1.

2.

6) In order to ensure I meet my grade goal, I need to improve my math study habits. Three specific strategies I will use are:

1.

2.

3.

Strategies for Success

Mid-term Check-up Part II **Name**_____

1) Evaluate your study habits by completing the following checklist.

So far in this class I have:

a) Been absent
_____ Never _____ 1 or 2 times _____ 3 or more times

b) Arrived in class on time
_____ Always _____ usually _____ rarely

c) Brought my text, notebook, and calculator to class
_____ Always _____ usually _____ rarely

d) Paid close attention and took good notes in class
_____ Always _____ usually _____ rarely

e) Organized my papers in my notebook the way my teacher recommends
_____ Always _____ usually _____ rarely

f) Scheduled time for homework
_____Every day _____ 2-3 times/week _____ once a week

g) Re-read or re-copied my class notes before doing the homework
_____ Always _____ usually _____ rarely

h) Completed each homework assignment before the due date
_____ Always _____ usually _____ rarely

i) Reviewed topics and/or problems that gave me trouble
_____ Always _____ usually _____ rarely

j) Studied with a friend or study group
_____ Always _____ sometimes _____ never

k) Used my instructor's office hours
_____ Often _____ 1 or 2 times _____ never

l) Used the Math Center or Tutoring Center
_____ Every week _____ 1 or 2 times _____ never

2) I will improve my chances of success in this class by taking the following steps. I will:

Strategies for Success
Attendance

To the Instructor:

Have you ever had a student come to you after missing a class and ask “Did you do anything important while I was gone?” This activity helps students face the fact that there are consequences of being absent from class and accept responsibility for finding out what they need to make up. They realize they are accountable for the number of absences they have, and think about why they are absent and how they can improve their attendance. The checklist provides a non-threatening way to give them ideas about what they can do to get back on track after missing one or more class meetings.

This activity can be done any time after the first few weeks of the term. It is best done individually at first, then followed by small group discussions.

You may want to do a wrap-up with the whole class to see which strategies may have been new to them (where they checked ‘never’) and what ‘other’ strategies were listed. It can also be helpful to have students write their ideas about how they can improve their attendance on the board.

Strategies for Success

Attendance **Name_____**

1) So far this term, I have been absent _____ times from this class.

2) My attendance has affected my performance in this class in these two ways:
   1.

   2.

3) Why is regular class attendance important?

4) If I miss a class, I know I have missed important information. To get back on track, I:

	Always	**Sometimes**	**Never**
a) check the course syllabus to see what I missed			
b) read the textbook			
c) try to find a way to turn in any assignments that are due			
d) contact a classmate to find out what was covered and get the new assignment			
e) get the notes from a classmate			
f) do the homework that was assigned, even if I can no longer turn it in			
g) go to my school's math tutoring center			
h) go to my instructor's office hour			
i) get help from a friend or family member			
j) other:			

5) (a) When I miss class, it is usually because:

(b) To prevent this from happening again, I will:

6) Two things I can do to improve my attendance are:
   1.

   2.

Strategies for Success
Study Group

To the Instructor:

Research has shown that participating in study groups can help students succeed. Yet many students in lower level math classes have never heard of study groups, and don't have the slightest idea how to set one up. Study groups are fairly common in higher level math courses, but this activity get the idea started earlier.

This activity outlines the benefits of being part of a study group and asks students to think about whether or not each would help them. Students who may already be meeting informally with some classmates may find that calling it a study group gives it legitimacy and more importance in their schedules.

This activity can be done at any time, either individually or in small groups. You may want to follow-up by allowing some class time for students to form study groups.

Strategies for Success

Study Group **Name_____**

Do you have a study group to help you with this class? Research has shown that participating in a study group is an important factor that contributes to successful course completion. A study group may be just two people or several, as long as they can find a regular time to get together. A study group may choose to meet at a place convenient to all its members, such as the college math center, a library, a local coffee shop – anywhere that has tables and chairs. Or, the group may prefer to have virtual meetings by setting up an online chat room or conference phone call.

1) What are some of the benefits of being in a study group?

Benefit	**I know this will help me succeed**	**I hadn't thought of this**
a) I can share and compare notes with other people in my class.		
b) I have colleagues to work with on practice problems and homework.		
c) I have colleagues to ask for help with concepts I don't understand.		
d) I have people to call if I have to be absent from class.		
e) I can improve my understanding by explaining concepts to others.		
f) I can review and quiz before a test with my study group.		
g) I make friends with my classmates.		
h) I can get support and encouragement from my study group.		
i) Other:		

2) How can you form a study group? A few ideas are listed below – check which ones you can do. Then list two other ways to form a study group.

_____ ask people who usually sit near me in class

_____ ask classmates I see in the math center

_____ write a note on the board of my classroom

_____ post a comment on my class website

_____

_____

Strategies for Success
Goals

To the Instructor:

It is very common for students to have achievable goals and yet not be prepared for the obstacles that may arise on the path to those goals. With no plan or forethought, students may become discouraged and give up when they encounter a 'speed bump.' With the realization that everyone has barriers, and, in fact, many have the same barriers, it is easier for students to look beyond the obstacles and learn to come up with a plan to go "over, under or around" them and persevere towards their goals.

It is also important to have students establish short-term as well as long-term educational goals. For some students in developmental math classes, it may be many years before they reach their long-term goals. They need short-term goals so they can feel a sense of accomplishment along the way!

This activity works best when used in week 2 or 3 after the 'start-up' chaos settles down and before the term is too far along. Once the students have finished the worksheet, have the class make a list on the board of the potential barriers . You may want to identify a campus resource that could help them deal with some specific barriers. For example, many students list child care as a barrier and they can be referred to the campus Childcare Center; if they list money as a barrier, they can be referred to the Financial Aid Office, etc.

But as early as the first day of class, you can start teaching students how to brainstorm. The class can brainstorm ideas to help students who cannot buy the book immediately figure out how they will do the homework if they do not yet have the book. Creative solutions are always presented and students are often surprised at all the possibilities. They end up feeling empowered that they can overcome this barrier rather that feeling discouraged or ashamed.

Similar brainstorming can be done on any number of topics early in the semester--time management, arranging childcare, getting help with math, etc. The time necessary to teach this brainstorming skill is time well spent. Many people have never been taught to think this way.

The Goals worksheet may easily be split into two assignments, one for short-term goals and the second for long-term goals.

Strategies for Success

Goals **Name**_____

What are your goals and dreams? To achieve your goals and make your dreams reality, you must recognize the barriers that may arise and learn to go over, under, or around those barriers. With a firm plan, and a good solid backup plan, you can reach your goal!

1) What is your **short-term** educational goal?

2) Name 3 things you must do to achieve it.
   1.
   2.
   3.

3) In the chart below, list 3 potential barriers to achieving your short–term goal and for each barrier, name something specific you can do to overcome or go around that barrier.

Potential barrier to achieving my short-term goal	My plan to overcome it

Reaching your ultimate educational goal may take years, but it is important to keep that goal in sight. Every step you take in your education brings you closer to your goal!

4) What is your **long-term** educational goal?

5) List at least three steps you must take to achieve this goal.
   1.
   2.
   3.

6) In the chart below, list 3 potential barriers to achieving your long-term goal and for each barrier, name something specific you can do to overcome or go around that barrier.

Potential barrier to achieving my long-term goal	My plan to overcome it

Strategies for Success
Thoughts in Charge!

To the Instructor:

Unpleasant past experiences with mathematics, derogatory comments made by former teachers or family members, feelings of uncertainty about basic number facts are part of the baggage that some students bring with them to the math classroom. Negative thoughts can become self-fulfilling prophecies.

In this activity, students examine the interrelationships between thoughts, emotions, body sensations, and behaviors. By comparing the effects of neutral and positive thoughts to those of negative thoughts, they see the better outcomes of neutral and positive thoughts.

This activity is one of three dealing with issues of Math Anxiety, adapted from *Managing the Mean Math Blues* by Cheryl Ooten (Ooten, C. (2003). *Managing the Mean Math Blues.* Upper Saddle River, NJ: Pearson Education, Inc.) These three activities are listed below and are best done in this order:

- **Thoughts in Charge**
- Neutralize Negative Thoughts
- Intervention Strategies for Negative Thoughts

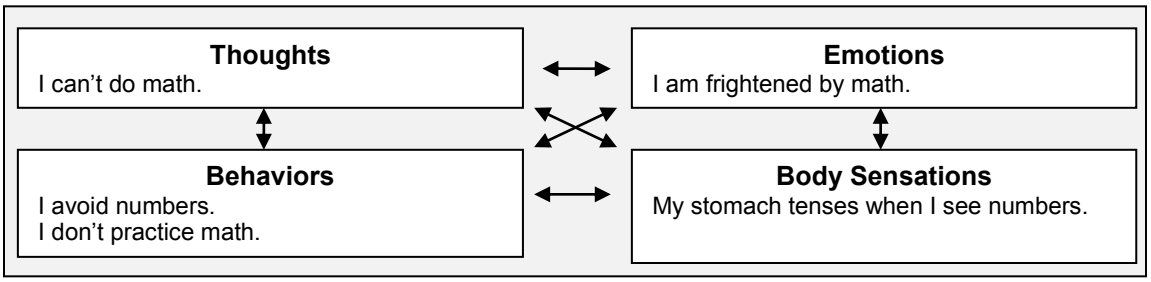
This activity can be done at any time. "Thoughts in Charge" was designed to be done individually. After each student has created an interrelationship chart, you may want students to compare their charts in small groups and then have each group put one chart on the board to spark class discussion. A few volunteers may also want to speak individually about their own personal thoughts, emotions, etc.

Strategies for Success

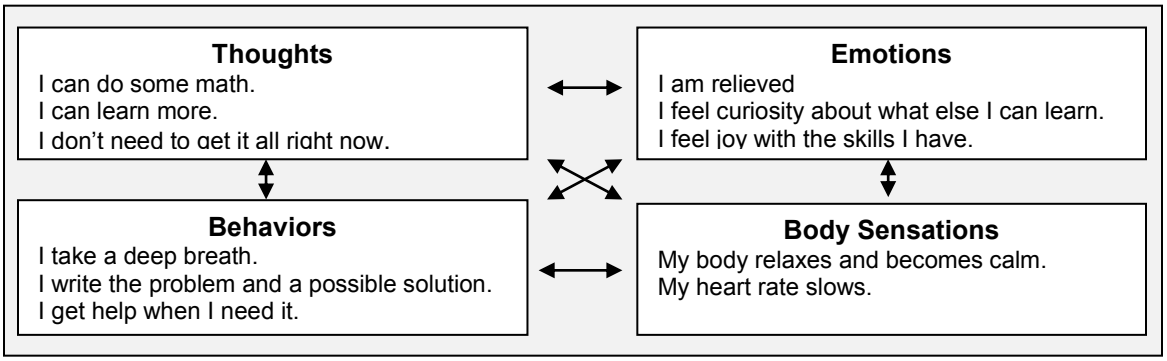
Thoughts in Charge! **Name_____**

Do you know that your thoughts can affect your emotions, body sensations and behaviors? Thoughts, emotions, body sensations, and behaviors are interrelated. Each one of them influences the other three. (Adapted from Ooten, C. (2003). *Managing the Mean Math Blues.* Upper Saddle River, NJ: Pearson Education, Inc.)

These "interrelationship" charts use arrows to show how thoughts, emotions, body sensations and behaviors are all related to each other. Read these two interrelationship charts, starting at the top left with the "Thoughts." Notice the effects of a negative thought on your emotions, body sensations and behaviors.



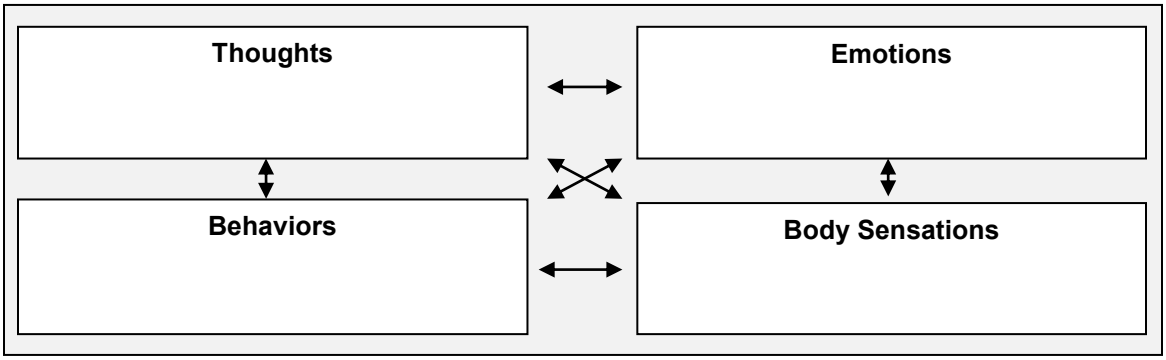
As you read the next chart, notice the effects of neutral thoughts.



1) What is your reaction to the two charts above?

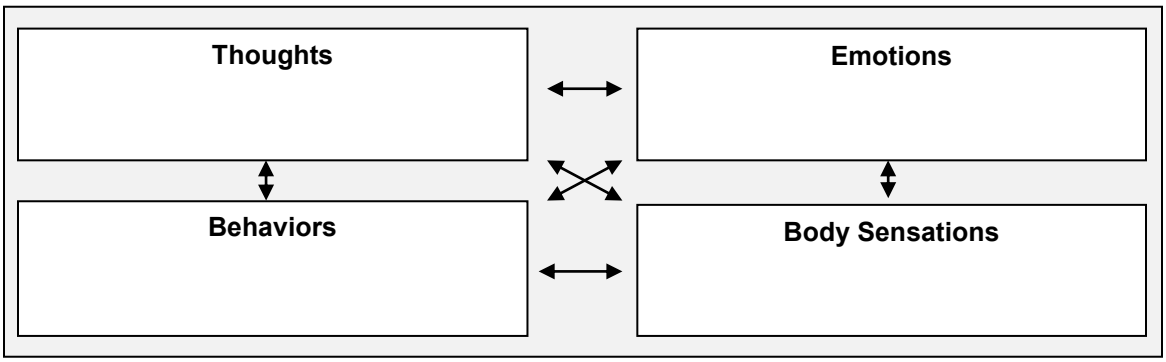
2) In the lists below, circle the thoughts, emotions, body sensations and behaviors that you have experienced. Then use them to create an “interrelationship” chart.

Thoughts	Emotions	Behaviors	Body Sensations
I will fail.	Frustrated	Avoid math	Palpitations
I will never do well.	Embarrassed	Blame the teacher	Sweating
I am incompetent.	Helpless	Tune out in class	Stomach ache
Math teachers hate me.	Anxious	Waste time	Hives
I am helpless.	Panicky	Avoid homework	Crying



3) In the lists below, the thoughts, emotions, body sensations and behaviors that you would like to experience. Then use them to create an “interrelationship” chart.

Thoughts	Emotions	Behaviors	Body Sensations
Practice helps.	Excited	Come to class prepared	Relaxation
I can get support.	In control	Consult teacher	Calmness
I have learned before.	Capable	Do my homework	Peace
I intend to understand.	Proud	Ask questions	Steady heartbeat
Understanding takes time.	Calm	Form a study group	Strength



Strategies for Success
Neutralize Negative Thoughts

To the Instructor:

Negative thoughts about math play over and over again, like a broken record, in the minds of some students. They form barriers between the students and success in math. Yet by changing the wording slightly, negative thoughts can be transformed into neutral statements. The addition of the little word 'yet', for example, changes the statement "I don't understand this" to "I don't understand this yet" and implies that understanding is a process instead of a fixed state.

By learning to recognize negative thoughts, as they do in this activity, students will begin to change their own self-talk. They see how making small changes in wording can 'neutralize' a negative thought. Students who have done the activity 'Thoughts in Charge' will realize that this change will have positive effects on their emotions, body sensations, and behaviors.

This activity is one of three dealing with issues of Math Anxiety, adapted from *Managing the Mean Math Blues* by Cheryl Ooten (Ooten, C. (2003). *Managing the Mean Math Blues.* Upper Saddle River, NJ: Pearson Education, Inc.) These three activities are listed below and are best done in this order:

- Thoughts in Charge
- **Neutralize Negative Thoughts**
- Intervention Strategies for Negative Thoughts

This activity can be done at any time. It was designed to be done individually. A useful wrap-up would be to have a few students write their answers to SS2—a negative statement with a corresponding neutral statement—on the board.

Strategies for Success

Neutralize Negative Thoughts **Name_____**

Recognizing and acknowledging your negative thoughts about mathematics is the first step towards changing your negative emotions, body sensations and behaviors. Once you recognize negative math thoughts, you can begin to consciously intervene to neutralize the negativity they create. The Strategy for Success *Intervention Strategies* will show you some interventions strategies you can use. (Adapted from Ooten, C. (2003). *Managing the Mean Math Blues.* Upper Saddle River, NJ: Pearson Education, Inc.)

1) Read each thought below and identify whether it is a negative statement or a neutral statement.

Negative	**Neutral**	
_____	_____	a) I will never understand math.
_____	_____	b) I feel dumb and stupid.
_____	_____	c) Math is out to get me.
_____	_____	d) This has happened to me before. I have worked through it.
_____	_____	e) Math problems contain tricks meant to stump me.
_____	_____	f) I cannot do math.
_____	_____	g) Maybe I need to ask some questions, or do some examples again.
_____	_____	h) Everyone understands what to do except for me.
_____	_____	i) Because I don't understand this, I will never be able to do math.
_____	_____	j) The learning process is challenging. There must be something I don't quite understand here.
_____	_____	k) I feel like an idiot.
_____	_____	l) I have many resources to assist me—the book, notes, examples, the instructor, friends and tutors.
_____	_____	m) Just because these few problems are difficult doesn't mean all the rest will be difficult too. This is an opportunity for me to figure out what I misunderstood and correct it!
_____	_____	n) I should understand this.
_____	_____	o) I will take notes or ask a question so I can clarify this concept.
_____	_____	p) Math is a process and it has a way of being harder, then easier, then harder, then easier.
_____	_____	q) The material is new to me. I am not expected to understand it all immediately. I have many resources to help me understand this.

Negative Neutral

_____ _____ r) The teacher will be upset with me if I ask questions about this.

_____ _____ s) Establishing a relationship with my teacher might make asking questions during or after class easier.

_____ _____ t) I can act positively by taking a deep breath and congratulating myself for being courageous enough to put myself in this class.

2) Choose two of the statements that you identified as negative thoughts above and rewrite each of them as a more neutral and useful, but still true, statement. For example:

Negative thought: "I hate fractions!"

More neutral and useful statement: "I don't completely understand fractions, but I can learn to work with them."

1. Negative thought: _____

   More neutral and useful statement: _____

   _____

2. Negative thought: _____

   More neutral and useful statement: _____

   _____

Strategies for Success
Intervention Strategies for Negative Thoughts

To the Instructor:

As teachers, we know the effects that negative comments can have on our students' self-image and ability to do math. We know that if we say "that's not quite right" rather than "no, you're wrong", the impact of the comment on the student changes and it provides hope instead of discouragement. Some students have negative beliefs about their ability to do math that are unsubstantiated and lack a logical basis. In addition, some negative thoughts are the direct result of unproductive behavior that can be changed, such as neglecting to do homework.

In this activity, students will become familiar with intervention strategies and practice using them on some common negative thoughts about math. (They will probably recognize some of the examples of negative thoughts as things they have said to themselves!) Once these strategies become part of their own personal 'toolbox', students will find they are useful in everyday life, too.

This activity is one of three dealing with issues of Math Anxiety, adapted from *Managing the Mean Math Blues* by Cheryl Ooten (Ooten, C. (2003). *Managing the Mean Math Blues.* Upper Saddle River, NJ: Pearson Education, Inc.) These three activities are listed below and are best done in this order:

- Thoughts in Charge
- Neutralize Negative Thoughts
- **Intervention Strategies for Negative Thoughts**

This activity can be done at any time. "Intervention Strategies for Negative Thoughts" can be done individually or in small groups. You may want to have a whole class discussion after everyone has had the chance to complete their own worksheet.

Strategies for Success

Intervention Strategies for Negative Thoughts Name_____

Here are some intervention strategies for negative math thoughts. When you catch your brain forming one of these negative thoughts, try an intervention strategy. With practice, you will be able to change the negative thoughts into alternative thoughts that will lead to more productive emotions, body sensations and behaviors. (Adapted from Ooten, C. (2003). *Managing the Mean Math Blues.* Upper Saddle River, NJ: Pearson Education, Inc.)

Strategy #1: Examine the Evidence.

- What is the evidence that your negative thought is really true?
- What would you do differently if this thought were false?

1) Suppose your negative thought is "I'm sure I will fail this class."

(a) What evidence could you check to see if you really will fail the class?

(b) If you are not failing the class, how might your behavior change?

Strategy #2: Get a Different Perspective.

- Tell yourself what you would tell a close friend who has this thought.

2) Suppose your brother said, "I am too stupid to do math." What would you tell him to convince him he is not too stupid to do math?

Strategy #3: Do Something Differently.

- Identify a behavior that contributes to your negative math thought. Behave in a new way to get a different result.

3) When learning math, just like when learning sports, music, a foreign language, etc., if you don't practice -- by doing homework-- you can't expect to become proficient. Not doing homework is a behavior that contributes to not being able to do math.

(a) How can you change this behavior to get a better result?

(b) Name one of your behaviors that contributes to your negative thoughts about math.

(c) How can you change that behavior to get a better result?

Strategy #4: Change the Wording.

- Restate a negative thought in a way that it becomes neutral or positive. Add the words "right now," or "yet."

For example:

- Change "I can't do math" to "Right now I am unable to do these math problems."
- Change "I don't understand" to "I don't understand yet."
- Change "I'm not prepared" to "I am not prepared yet."

4) Change the wording of two of your negative thoughts.

1. Change _____

   to _____

2. Change _____

   to _____

Strategy #5: Act "As If."

- Act as if you have the trait you lack or already are the kind of person you would like to become.

5) If you want to be a successful math student, think about how good math students act. What behaviors could you do to act "as if" you were a successful math student?

Strategies for Success
Can You Hear Me Now???

To the Instructor:

With current technologies, college students are among the many people feel the need to stay connected 24 hours a day, 7 days a week. Many students see nothing wrong with keeping their cell phones on and visible during class. They don't realize that the sound of a cell phone signal or the sight of someone leaving class to take a call disrupts the academic environment of the whole class. Some students don't consider texting the same kind of 'offense' as talking on a cell phone, so texting is also addressed.

This activity addresses two consequences of keeping a cell phone on in class. One is the disrespect for the academic environment for their classmates and teacher. Students should realize that their classmates have a right to an undisturbed academic environment so they can learn. The other consequence is the inability of the cell phone owner to give full attention to the class.

This activity can be done at any time. It was designed to be done individually, but there could be small group discussions after each student has completed a worksheet. You may wish to have students list their answers to *SS2* on the board for class discussion. In the discussion, you might let students know that in case of a rare special circumstance requiring a student to be on the alert for a call or message, they should let you know and you will work with them to accommodate that need. That will promote the feeling that you and the students are working together towards their success in the course.

Strategies for Success

Can You Hear Me Now??? **Name_____**

Have you ever been in a movie theater and heard someone's cellphone ring? Or maybe someone in the theater was carrying on a cellphone conversation while you were trying to concentrate on the movie? When someone in the audience takes a phone call during a movie, it disrupts the theater environment. Similarly, cellphone use during class is disruptive to the academic environment.

1) The table below lists several statements related to the use of cellphones during class. Indicate whether you agree or disagree with each statement.

	Agree	**Disagree**	**Neutral**
a) My classmates have the right to have an academic environment that supports their learning.			
b) A cell phone is 'on' even when it is in silent mode.			
c) It is rude to have my cell phone on during class.			
d) If my cell phone rings during class it is distracting to my classmates and teacher as it disrupts the academic environment.			
e) If my cell phone rings during class it interrupts the flow of the class.			
f) Even if my cell phone is on silent, its vibrations are noticed by those sitting near me.			
g) Taking phone calls during class is disrespectful of the teacher who put great effort into preparing the lesson.			
h) If I leave class to answer a call, I have distracted my classmates, lost my concentration, and missed out on the material covered while I was gone.			
i) Texting in class puts my thoughts and focus somewhere other than on the math being covered.			
j) My cell phone has voicemail.			
k) There are very few situations in my daily life that cannot wait two hours for my reply.			
l) If I have an urgent situation going on in my life that may require me to be contacted immediately, I can talk to my instructor about discretely and silently keeping my cell phone on during class.			

2) List 3 reasons why students should not text during class:

1.

2.

3.

Strategies for Success
A Gift to Yourself

To the Instructor:

Success in college is the result of a myriad of behaviors and events. In a sequential subject like math, each topic builds upon previous knowledge and each course builds on its predecessor. Many students in basic skills courses don't yet realize the consequences on their learning and long-term college success of not giving 100% in every class.

In this activity students are encouraged to think of their education, and the time required to attain it, as a gift they give themselves. This gift should be protected and cherished, by fully focusing during each class meeting. Distractions, like cell phones, and books and homework from other classes, should be put away so that students can take full advantage of the learning opportunities of every class meeting.

The activity can be done at any time. The worksheet is designed to be completed individually. You may then want to have students list the behaviors on the board, as a springboard for a class discussion.

Strategies for Success

A Gift to Yourself **Name_____**

Choosing to get an education is a precious gift you give to yourself and to your future. Do everything you can to protect that gift and cherish it as much as possible. View each class meeting as irreplaceable and the knowledge you gain there as a critical pieces of your education. Take full advantage of your gift of time! Give your full focus at every class meeting. Each class and each assignment make a contribution to the end result—your education.

1) Consider the statements in the following table and indicate whether you agree or disagree with each.

	Agree	Disagree	Neutral
a) I want to succeed in college.			
b) I want this course to give me a solid foundation for my next math class.			
c) Every topic in this course is important to my success in the next math course.			
d) I want to get as much from each class meeting as possible.			
e) If I earn an A in this course I will be better prepared for my next math course than if I earn a C.			
f) I am less efficient when I multitask than when I focus on a single job.			
g) I cannot give 100% of my attention to two things at the same time.			
h) I put away my cell phone, books, and homework from other classes when I am in my math class.			

2) I show my appreciation for my gift of time in this class by demonstrating these 3 behaviors:

1.

2.

3.

Strategies for Success
Math Plan

To the Instructor:

Math teachers, of course, are intimately acquainted with the scope and sequence of the math curriculum. We know how each class fits into the big picture, and where the concepts covered in one class will show up in the future. We know that it is best for students to continue through the math sequence without a break, taking math every term until their math goal has been achieved. But many students aren't aware of all this. They see each class as an end in itself, and don't realize its connection to their overall educational plan and success. They cobble together each term's schedule haphazardly, choosing classes at convenient times or with their friends.

This activity asks students to think about their long-term math goal by identifying the highest level of math required for their college or career goal, and to name the math course they should take next term. It also makes them reflect on the behaviors and study skills they have used in this class and commit to making specific improvements.

Since each student's educational plan is uniquely their own, this activity is best done individually. A useful wrap-up activity would be to have students discuss, in small groups or as a whole class, the behaviors and study strategies they felt have helped them the most.

This activity was designed to be done near the end of the term, when students are planning their next term's schedules.

Strategies for Success

Math Plan **Name_____**

Because math skills in each course build upon the skills from the previous course, it is best to take your math classes in sequence, without taking a break of one semester or more between them. Now is the time to start thinking about your next math class!

1) To reach my college or career goal, I need to take math up through _____.

2) The math class I should take next semester is _____.

3) The successful student behaviors that helped me the most in this course have been:

    1.

    2.

4) The study strategies that helped me the most in this course have been:

    1.

    2.

5) In order to increase my chance of success in math classes, I will improve my study skills by:

Strategies for Success
The End is in Sight!

To the Instructor:

Fifteen or sixteen weeks, or more, is a long time for students to keep their motivation up. Many students start the term strong and then fall apart towards the end. They get tired of the routine of classes and homework, and overwhelmed by what they have left to do. The end of the term is a very demanding time for students who have to deal with papers, projects, and exams for all their classes in a short period of time. And the fall term has the added stress of holiday preparations and possibly extra hours on the job.

In this activity, students are guided in organizing their time to accomplish the remaining work in their math class. They are asked to list the tests and assignments they have yet to do. Then they decide whether or not the number of hours they usually spend each week on math will be sufficient to get all their work done, and, if not, they figure out how they can adjust their schedules.

This activity is best done three to four weeks before the end of the term. It is meant to be done individually, but a quick class wrap-up might include a show of hands for how many students need to increase the number of hours they spend on math and a brief discussion of their ideas of how to adjust their schedules.

Strategies for Success

The End is in Sight! **Name_____**

Crunch time is coming! You are now more than three-quarters through with this course and the end of the term is in sight. But you need to make sure you don't lose your momentum or get distracted by your other duties and responsibilities. The effort you put into completing your math class successfully will really pay off. As a marathon runner might say, "It's time to sprint towards the finish line!"

1) There are ____ weeks left until the end of this course.

2) I have _____ math tests scheduled between now and the final exam. They are scheduled on the following dates_____.

3) Other math assignments that must be done before the final exam are:

4) I have usually spent _____ hours per week, not counting class hours, for this class.

5) In order to pass this class, the number of hours I spend each week for this class should ____increase OR _____stay the same.

6) So that I stay focused and do not jeopardize my success in this class, I have to increase the amount of time I spend on math, I will make the following adjustments to my weekly schedule:

Strategies for Success
Excuses! Excuses!

To the Instructor:

We've heard them all! It is hard to believe that students really think their flimsy excuses for missing class or not doing an assignment are valid. And even if they were, then what? The student has missed important work. Whose job is it to catch up?

In this activity students are given the opportunity to look at some common excuses and think about their responsibility to remediate them. Students begin to realize, for example, that asking to do a review assignment after a test misses the point of the whole assignment. They think about what successful students would do if they miss class, misplace their textbook, or leave their homework at home.

This activity can be done individually or in small groups. It can be done at any time after the first few weeks of the term, when the class has developed a sense of camaraderie. A whole class debriefing of 'what a successful student would do' can help bring good ideas to light.

Strategies for Success

Excuses! Excuses! **Name_____**

Math teachers hear all sorts of excuses from their students for not fully completing class assignments. Let's look at some of the most common excuses. For each excuse listed below:

(a) explain why this is not a valid excuse.

(b) describe what a successful student would do in this situation.

1) "I don't have my homework because I was absent."

(a)

(b)

2) "I don't have my homework because I don't have a book."

(a)

(b)

3) "I did not finish the assignment. I forgot about it!"

(a)

(b)

4) "I left my homework paper at home."

(a)

(b)

5) "I didn't do the chapter review/chapter test assignment. Can I do it after I take the test?"

(a)

(b)

6) "I was absent—did you do anything important?" *(This is the favorite of many math teachers.)*

(a)

(b)

Strategies for Success
Support from Family and Friends

To the Instructor:

Many college students live with their families – their parents and siblings, or spouse and children. Their families may not realize that the time commitment required for success in college extends far beyond class time. They may expect their college students to fulfill all the same responsibilities at home as if they were not taking classes.

This activity helps students identify and give voice to their needs. They learn that they have the right to ask for help, support, and understanding from their family and friends. They see that it is ok to decline to attend social and family events that would cause them to miss class or fail to do their homework. Students will feel empowered to make it known that their education is their foremost priority.

This activity can be done any time after the first few weeks of the term. It was designed to be done individually. You may want to have a quick wrap-up with small groups or the whole class sharing their ideas of what other requests they need to make.

Strategies for Success

Support from Family and Friends **Name_____**

When you were a child, did your family help you prepare for the first day of school? Maybe they took you shopping for new clothes, a new pair of shoes, and a notebook? As a college student, you still need the support of your family and friends to help you succeed. But the support you need from them may not be as obvious as when you were younger. Analyze your own situation to identify what you need to be a successful student. Then be pro-active in letting your family and friends know how they can help you!

1) The table below lists several ways you may inform your family and friends of your needs as a student. How do these apply to you?

	I have said this	**I didn't, but knew I should**	**I had no idea!**	**Does not apply to me**
a) I need a quiet place to study.				
b) I need to have fewer chores at home so I have time to study.				
c) I need to work fewer hours so I have more time to study.				
d) I can't go to the movies/party/dance because I have to study.				
e) I can't miss class to go to the doctor/dentist.				
f) I can't miss class to babysit.				
g) I can't miss class to go to a funeral.				

2) I have also asked my family and friends to help me succeed in college by …

3) As a result of this exercise, I now realize it would be a good idea to ask my family and friends to help me succeed in college by making the following requests:

Strategies for Success

Stay on Campus--Stay on Task!

To the Instructor:

Many students need help separating their home and social lives from their lives as college students. When they leave campus, there are many distractions and demands on their time that makes it difficult to complete their schoolwork. These students benefit from encouragement to stay on campus to do their homework and as well as take advantage of campus support services. They may need guidance in finding ways to put 'free time' between classes to good use. They may need help becoming empowered enough to tell their families that they need to spend more time on campus than just class time.

This short activity focuses student attention on the benefits of staying on campus beyond class time to do their homework. Students may recognize benefits such as having time to attend office hours, tutoring, and study groups, doing homework soon after class while the ideas are still fresh, taking advantage of quiet and comfortably heated or air-conditioned places on campus, and more. Students will find out where and when places on campus are available for them to do their math homework.

The worksheet can be done individually or in small groups, at any time after the first few weeks of the term. A whole class wrap-up is recommended, to ensure that everyone has the campus information complete and correct.

Strategies for Success

Stay on Campus--Stay on Task! **Name_____**

Your overall time commitment to college includes study and homework time. Most colleges have places where students can study and do homework. Staying on campus to study can help you succeed by keeping your family and social life separate from school. Scheduling study time on campus also makes it easier for you to use campus support services, like tutoring, counseling, and your instructor's office hours. And when you complete your homework at school, you leave campus with the satisfaction of knowing that you are free!

1) Do you stay on campus after your classes are done?

2) Two places on campus where I can do my math homework are:

1.

2.

3) The hours I can do my math on campus are:

Monday	_____	Friday	_____
Tuesday	_____	Saturday	_____
Wednesday	_____	Sunday	_____
Thursday	_____		

4) Staying on campus to do my math will help me because:

Strategies for Success
Final Exam Prep

To the Instructor:

Students seem to fall into two camps when final exam time approaches. Some students continue with the same habits and behaviors they have used all term and think that if they just show up for the final exam, they will be sufficiently prepared to succeed. Other students experience stress just thinking about all they have left to do and how they will have to remember so much from the course. Both groups can benefit from some guidance in how to prepare for final exams.

This activity has three parts:

- In Part I – 'Get the Facts and Get Organized', students are asked to write down the logistics of their final exam – when, where, what format, what do they need to bring. Knowing they are organized will give students a sense of control and help alleviate some of the stress.
- Part II is titled 'Make a Study Plan'. Several strategies to review the course material are suggested and a sample study plan is given. Students are asked to create their own personal study plan and to identify the date on which they need to begin.
- Part III – 'Make a Time Management Plan' has students create schedule showing all their activities and obligations for the 3 weeks leading to their final exam. They analyze their schedules to judge if they have enough time for final exam preparations, and identify any changes they may need to make to accommodate more study time.

The three parts can be done separately, on three different days, or altogether, as one longer worksheet. To maximize its effectiveness, this activity should be done three to four weeks before the final exam. Part I can be done individually or in small groups, with a whole class wrap-up to ensure everyone has complete and correct information. Parts II and III are better done individually, but a brief class discussion of the schedule changes that can be done to accommodate extra study time would be helpful to all.

Strategies for Success

Final Exam Prep **Name_____**

Part I - Get the Facts and Get Organized.
Final exam time is very stressful for both students and faculty. So why do we have final exams anyway??? During the course you learned the material in chunks—sections and chapters. It is now time to pull it all together and firm up the concepts before you head to the next course.

All the test taking strategies from earlier in this course still apply to preparing for the final exam, but there are some additional things to do and consider. The more prepared you are, the less stressed and more confident you will feel.

Get the facts: I need to find out all I can about the final exam so I can be prepared, knowledgeable and ready to go!

1) My final exam is:

Day_____ Date_____ Time_____ Location_____

2) My final exam will cover the material contained in:

Whole book_____ or Chapters ___to___ or Other_____

3) Thinking about the types of questions, number of questions, time limit, etc, I know the format of the final will be:

4) The final exam affects my course grade. The amount the final exam counts toward my course grade is:

Get organized: By getting organized ahead of time, I will reduce stress and feel more confident on the test day!

5) I need to bring the following materials to the final:

_____Student ID _____Pencils

_____Eraser _____Calculator

_____Scantron _____Blue Book

_____Review assignments that must be turned in

_____Anything else due the day of the final exam: _____.

_____Other:_____

Part II - Make a Study Plan
Students often say they will "study" for the final, but what exactly do they mean? You need a specific plan to review the material covered and to ensure your success. It has been shown that cycling through the material 3 times reinforces learning. To accomplish this, you can:

1. **Review each chapter**
   - Chapter Summary – I will read it carefully. If there are words or concepts I don't remember, I will reread the referenced sections.
   - Chapter Review -- I will do all the odd problems on paper and if I need help, I will go to the referenced sections for more practice.
   - Chapter Practice Test – I will do every problem to insure mastery.

2. **Redo my old Tests** - I will put pencil to paper and redo every problem. Then I will check my answers with my test corrections.

3. **Cumulative Reviews** - I will do at least every-other-odd problems in each review. I realize that this will be most like the final exam and the time I spend here will pay off!

1) Create and order your own Study Plan. Use a separate sheet of paper or the last page of this worksheet. You may want to follow this example:

1. Review each chapter

_____Chapter 1
- Review the Chapter Summary
- Chapter Review
- Chapter Practice Test

_____Chapter 2
- Review the Chapter Summary
- Chapter Review
- Chapter Practice Test

_____Chapter 3
- Review the Chapter Summary
- Chapter Review
- Chapter Practice Test

etc.

2. Redo your class tests

_____ Redo Test 1
_____ Redo Test 2
_____ Redo Test 3
_____ Redo Test 4
etc.

3. Do Cumulative Reviews in the textbook

_____Do Cumulative Review on Chapters 1-2
_____Do Cumulative Review on Chapters 1-3
etc.

2) Obviously, you cannot do all that preparation the night before the final! Look at your study plan and decide how many weeks before the final you need to start to get it all done.

(a) I will start my Final Exam preparation on_____ (date) which is ____ weeks before the final exam.

(b) My first step will be to:

(c) After I have completed the first step, then I will:

Part III - Make a Time Management Plan
Success on a final exam involves more than showing up the day of the test. Laying out a time management plan will help get you organized and make sure you allow enough time for preparation. Once you see it all laid out, you will know what adjustments you may need to make in order to have enough time to study.

1) Make a time management plan a few weeks before the final exam to show what you need to do when.
   Create a chart like the one shown and include:
   - Classes
   - Major assignments that are due
   - Final exams
   - Work schedule
   - Blocks of time to prepare for finals
     - Show when you will study each chapter.
     - Show preparation time for math as well as all your other classes
   - All other scheduled activities

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
2 weeks before final							
1 week before final							
Week of final							

2) Now that you have your time management plan, look at it carefully. To have enough time to study, you may have to make some adjustments to your work schedule, child care, home life, chores, and social obligations.
   - Adjust your work schedule, if possible, so you have more time to study and prepare for your final exam.
   - Ask your family to cover your usual chores. You may have to promise you'll do more after the term ends!
   - Postpone family celebrations and holiday preparations until the finals are over. Or prepare really early—you don't want to add to final exam stress.
   - Restrict your social obligations until after finals are finished. But do make plans to celebrate afterwards!
   - Other?

In order to finalize my time management plan, I will take these three steps:

1.

2.

3.

Strategies for Success
Grade Check Up

To the Instructor:

Near the end of a course have you ever had students come to you and ask whether they have even a chance of passing? It is surprising (or dismaying?) how many students don't have a clue of what their grade might be. Yet they probably have had feedback throughout the term, by means of returned graded homework, quizzes, and tests. And students at all levels of mathematics should have the skills to calculate their grade.

This activity, best done in the last week or two of the term, guides students through calculations to determine their current grade, identify what work remains to be graded, and find how much that remaining work contributes towards their course grade. Then they face a reality check: is their grade goal attainable? If not, what is a more realistic goal? Finally, they are asked to commit to three things they will do to make sure they do well enough on the final exam to reach their goal.

Since this activity relates to personal goals and grades, it is best done individually. A quick personal conference with each student can be beneficial to double check their grade calculations and give them a mini pep talk. After all students have filled out the worksheet, you may wish to ask for some volunteers to share their ideas for what they will do to make sure they succeed on the final exam.

Feel free to adapt this activity to accommodate your own grading routine.

Strategies for Success

Grade Check Up **Name_____**

You are quickly approaching the end of this class! Do you know what your course grade is right now? What score will you need to earn on the final exam in order to pass the class?

1) Looking at my course syllabus,
   (a) the grading scale for this course is:

   A=_____ B=_____ C=_____ D=_____ F=_____

   (b) Are these percents or cumulative points?

2) My goal for this class is to earn a(n) _____A _____B _____C.

   (a) To achieve this goal, I need _____ points/percent.

   (b) Right now, I have _____ points/percent in this class.

   (c) I need _____ points/percent more in order to achieve my goal for a final grade.

Points needed :	
Points I have now :	—
Points I need to achieve my goal	

3) The final exam contributes _____ points/percent to my course grade.

4) (a) I still have the following assignments to turn in:

   (b) They are worth _____ points/percent towards my course grade.

5) Reality Check: Is my goal attainable? _____ yes _____no If not, what is a more realistic goal at this point?

6) Three things I will do to make sure I do well enough on the final exam to help achieve my goal are:
   1.

   2.

   3.

Strategies for Success
Look Back, Look Forward

To the Instructor:

Too often, once final exams have been completed students (and some teachers, too) literally 'close the book' on their schoolwork and put it out of mind until the next term is nearly upon them. We all would benefit from taking some time for self-reflection, to identify what went well this term and what could have been improved.

In this short worksheet, students reflect on the study skills they used in this class. Thinking about the skills that helped most and those that could use improvement can help them become more successful in their next math class.

This activity was designed to be done in the last week or two of the course, possibly incorporated into a 'review for the final exam' lesson. It is best done individually. After everyone has completed the worksheet, a nice positive ending would be to have students list on the board the study skills they found most helpful. This will boost their self-esteem and give them self-confidence right before the final exam.

Strategies for Success

Look Back, Look Forward **Name_____**

As you finish up this term, it is good to take some time to reflect back on the study skills you used. Just like many people reflect on their past behavior at the end of a year and make resolutions for the New Year, you can identify what study skills worked for you this past term and resolve to continue your good habits and/or adopt some new good habits in your next term at college.

1) List 3 study skills that helped you to succeed this term:
   1.

   2.

   3.

2) Were there any of your study skills this term that could use improvement? List them here:

3) For each study skill you listed in #2, identify how you can change to be more successful in your next math class

.

Strategies for Success
Reward Yourself!

To the Instructor:

Many of our students who successfully finish a developmental math class have had to overcome tremendous obstacles. They have made sacrifices of their time, money, relationships, and more. Some of them have no-one who supports their dream of getting an education. In the day-to-day struggle to get by, they may not take time to celebrate their success. It is surprising how many students have never thought of rewarding themselves with a simple pleasure to recognize their accomplishments! By reflecting on their accomplishments and promising themselves a symbolic reward, they may become energized and ready to tackle a new class!

It is fun to have students share their idea for 'rewards.' Our students have promised themselves a relaxing bubble bath with candles, a shopping trip to the mall, a six-pack of a favorite beverage, a dinner at a favorite restaurant, a day at Disneyland, a trip to some enticing place, and more. This activity can relieve some of the pre-final stress as it gives students a reason to look forward to some event that will occur soon after their exams are done.

This activity is best done in the week before the final exam. As the class reviews their math skills, it is appropriate to bring to focus the overall learning experience. Student responses to 'the most important thing I have learned….' are always insightful, and often have nothing to do with math concepts. And if your students have come to know and support one another as a community of learners, this activity helps them celebrate their accomplishments with each other.

Strategies for Success

Reward Yourself! **Name_____**

Congratulations! You have nearly achieved your goal of completing this class successfully! It's now time to savor your accomplishment and appreciate what you have achieved.

Reflect on the following.

1) The most important thing I have learned in this class is…
(This may or may not be a math concept.)

2) I am most proud of…

3) Fill in this table:

The hardest thing I had to overcome was…	To overcome this barrier I ……

Celebrate your accomplishment! You sacrificed a lot to achieve your goal of completing this class. Think of a specific thing you can do to reward yourself after the final exam. It doesn't have to be costly - just something you give to yourself to acknowledge your success. Be creative and ask yourself what would make you feel special and honored. Take time to reward your success!

4) To reward my accomplishment I will:

