Goal Setting

What are SMART goals?

Here is an excerpt from https://tinyurl.com/dxfnr7k

SMART stands for specific; measurable; attainable; relevant (and rigorous, realistic, and results-focused); and timely (and trackable). Learning how to frame goals as SMART goals and being willing to adjust them to get SMARTer is an important skill that can help every student get off to a better start and have a better school year, this year and into the future.

Here is a practical example, starting with a typical, but not especially SMART, goal: "I will do better on my report card in the next marking period."

Here is a way to make it SMARTer: "In the next marking period, I will get at least a C on all my math tests, and at least a B on most of my quizzes and homework assignments."

But it's not SMART yet because it has no action plan or benchmarks. Here is a pretty SMART goal: "In the next marking period, I will take careful notes and review them at least two days before tests and quizzes so that I can ask the teacher questions about what I don't understand. I will do my math homework before I do things with friends, and when I hand it in, I will ask the teacher about anything I am not sure about. When I get anything wrong, I will make sure to ask the teacher, or one of my classmates how they got the right answer."

It's not easy to write SMART goals. This skill takes time to develop. A goal is an outcome, something that will make a difference as a result of achieving it. It can't be too ambitious to be out of reach, but also not so simple that it does not challenge. A goal has to be realistic with a stretch, requiring effort and focus to achieve it. That's why goals need timeframes and measurable action steps along the way so that students can keep track of progress and make adjustments as necessary.

- Specific: Your goal should be clear and specific, otherwise you won't be able to focus your efforts or feel truly motivated to achieve it.
- Measurable: It's important to have measurable goals, so that you can track your progress and stay motivated. Assessing progress helps you to stay focused, meet your deadlines, and feel the excitement of getting closer to achieving your goal.
- Achievable: Your goal also needs to be realistic and attainable to be successful. In other words, it should stretch your abilities but still remain possible.
- Relevant: This step is about ensuring that your goal matters to you, and that it also aligns with other relevant goals.
- Time-bound: Every goal needs a target date, so that you have a deadline to focus on and something to work toward.

Example SMART goals

Core goals

- I will actively engage with the course material while keeping a balanced schedule: I will spend 8-12 hours a week working on this course. I will be aware of spending that time effectively, such as actively reading the book instead of passively reading (same goes for watching videos), coming to class prepared so I can work productively with my group, and ensuring I have support by attending pirate sessions or office hours when I have questions. If I find I am spending less than 8 hours regularly I will engage with more of the optional assignments such as WeBWork, challenge problems, or more meta-cognition. If I find I am spending more than 12 hours regularly I will work with the professor to par down my work and make sure I am spending my time effectively on what is most important to my learning.
- I will become proficient in the core calculus concepts: Each week I will work towards gaining proficiency in the calculus standards. I will demonstrate proficiency by (i) internally judging I am proficient and (ii) externally demonstrating proficiency by:
  - Completing Active Calculus activities with minimal errors, and by revising activities to correct errors.
  - Completing WeBWork problems.
  - Demonstrating proficiency on self assessment questions, and by revising self assessment questions with errors.

  After submitting I will review the solutions and read feedback and submit revisions for important concepts that I was unclear on. I will make a list of questions I have on each assignment and work with the professor, a pirate, or my peers to answer these questions.
- I will learn how to effectively self study from a math textbook (or possibly other resources): Before each class I will complete the preview assignments. I will read each section and while I am reading I will keep a notebook to summarize important concepts in my own words, jot down thoughts and questions as I read, highlight important passages, and attempt to work through examples the book presents. If I find it useful I will use similar active engagement techniques watching videos covering the material on the course website or some other site such as Khan academy.
- I will develop a growth mindset and other meta-cognition skills: I will complete the weekly meta-cognition exercises. I will make sure to spend at least thirty minutes of focused time completing reflections each week. I will seek to implement the strategies I learn, such as growth mindset, effective studying techniques, and making goals. I will reflect on my progress with these meta-cognition techniques weekly on my self diagnostic.
- I will work productively with my group and learn how to effectively communicate mathematical ideas: I will come to class prepared by having done the preview activities and read the book. During class I will actively work on embodying the group norms we have established. In particular I will seek to be both an active contributing member to group conversations while also giving space for other group members to contribute. I will practice explaining my understanding of math verbally to my peers and the professor. I will measure this by doing a self-assessment of how productive my group interactions feel on my weekly self diagnostic. If my group work is not feeling productive I will talk with the professor or my peers about way to make it more productive.

Other ideas for goals

- I will improve my relationship with math and feel more confident as a mathematical thinker! Each week I will spend 10 minutes answering an additional question on my weekly diagnostic about how I am feeling as a mathematician. I will reflect on my growth/fixed mindset, my imposter syndrome, and my accomplishments in the course. How else can I make this goal measurable?

- I will attend mathematical events and engage with the mathematics community at Swarthmore. I will seek to attend at least four mathematical events this semester such as a colloquium, the puzzle collective, a GEMS event, or some other such event.

- I will master pre-calculus skills to solidify my mathematical foundations: I will spend 1 hour each week working on activities and problems from "Active Prelude to Calculus" to strengthen specific pre-calculus topics that I feel I have not mastered such as trigonometric functions, exponential and logarithmic functions, inverse functions, and general algebra skills.

- I will complete additional WeBWork exercises to solidify my understanding of the core calculus techniques: I will complete all of the assigned WeBWork problems each week. For any problems that I do not understand or have questions about I will seek help from the professor or a Pirate.

- I will attempt the challenge problems each week and write out a careful solution. If I have questions I will seek out the professor or a Pirate.

Goal setting exercise

After reading the above example goals I want you to make your own goals for this semester. I want you to make them your own, goals that you really feel like working towards. Feel free to copy all or parts of the above goals as your own if you identify with them. Feel free to modify them. Also feel free to make new goals that do not appear above. For each goal, go through the five elements of a SMART goal and modify it to make it SMARTer.