

## **My Experiences Preparing for and Taking the SAT in Summer 2026**

I recently took the SAT so that I could live through the experience myself in an effort to give advice to my daughter, Anya, and others who might ask me for advice in preparing for the exam. While I've taken the SAT several times before, I felt that my prior experiences may not be fully relevant in giving advice to approaching the current SAT.

Anya just started eighth grade and I wanted her to experience two things this past summer in preparation for high school: community service truly geared towards helping the needy and the SAT. The former will be the subject of a different piece I have yet to write, so I will focus on the latter. First and foremost, I wanted to get a baseline for Anya's level with respect to the types of questions asked on the SAT. When my older daughter, Simi, took the SAT for the first time, the Duke TIP program still existed, so we were able to get a baseline when she was in seventh grade for her skills at that time. After COVID however, Duke stopped its program and there isn't a widespread effort to get middle school students to take the SAT. I knew that Anya would be busy with homework and activities come fall, so the goal was to sign up for the SAT either in the summer or early fall. By the time we looked into sign up dates, the first date available was August 22, 2026, two weeks into Anya's fall semester. As I did with Simi, I decided to take the exam in person as well, so that I could experience it firsthand for myself and gather my thoughts so that I could later advise Anya when the time came for her to take the exam "for real."

After signing her up, Anya insisted that we don't buy the Official SAT preparation book. Because of issues with my college board account, I was unable to sign up when she did. A few days later, after calling customer service, I was able to create a new account, link it to my old account, and sign up for the exam. This time, for learning purposes, I did buy the preparation book. (Of course, Anya wasn't looking over my shoulder this time, so I was able to get away with it!)

When I took the exam in January of 2017, it was still on paper and had several sections, including an optional writing section. I wrote about that experience, but at this point what I mainly remember was the importance of leaving your cell phone at home and how surprised I was at how close to the time limits I got. This time around, the test was digital and adaptive, with four total sections and a total testing time of only two hours and 14 minutes. From an educator's standpoint, the length in the test comes with both pros and cons: on the one hand, it's nicer for the students and administrators that the test is shorter and still accurately gauges students' proficiency with the material, on the other hand, with students preparing for a shorter test, students are no longer rewarded for having longer attention spans and learning how to concentrate intensely for longer periods of time. This skill is required for quite a few professions, and having practice at it during high school helps build the skill, in my opinion.

Once I received the official preparation book in the mail, I looked at how it was designed. The first few chapters outlined the test format and what to expect on test day. The next few chapters went over material from both sections: Reading/Writing and Math. This was followed by several practice tests with detailed solutions. The beginning of the book went to great pains to explain the adaptive nature of the test. All students are given the same first module in both the Reading/Writing section

and the Math section. Based on how a student does on the first module, they are either given an easier or harder second module in that area. Specifically, students are first given Module One of the Reading/Writing section with 27 questions and a time limit of 32 minutes. Based on how they do on that module, they are either given an easier or harder version of Module Two. This is then repeated for both of the Math modules. The idea is as follows: if a student misses many questions on the first module, then there's no point in asking them harder questions that they will almost certainly miss. If we want to gauge exactly where their knowledge stands, it's better to ask them easier questions. Similarly speaking, if a student answers nearly all of the questions in the first module correctly, there's no point in asking them many more easy questions that they are almost certainly going to solve, as this provides no new information about the student. Instead, in this case, it makes sense to ask harder questions to get an accurate basis for where the student stands. All told, with adaptive testing, instead of asking ALL students the same 60 questions, we can obtain the same score within a reasonable confidence level, via two adaptive modules of 20 questions each, making use of the fact that how well students do on two different questions isn't always independent. From the college board's point of view, this is a win-win: students' performances are still measured equally accurately, but at less cost (time). Educators would also argue that a student who struggles with the first module will emotionally feel less defeated with an easier second module.

Once I understood this design, I decided to try a written practice test on paper, from the book. The book presents its practice tests by providing six modules for each practice test: the first module as well as both of the easier and harder second modules for both sections. Students are free to choose which two modules in each section to do, or can do all three of them. The book provides separate scoring instructions based on whether students attempt the easier or harder second module. (Note: it's possible to do the easier second module for one section and the harder second module for the other section.) Based on previous scores, I decided just to do the harder second module for both sections.

Luckily I had a short heads up when reading the beginning chapters: all reading passages were shorter and self-contained to a single question, in contrast to all previous SATs and practice SATs I had taken. Just like other changes, this one comes with pros and cons. A benefit of the new design is that if a student just doesn't understand a whole passage, they aren't automatically out of luck for a set of five questions. One draw back of the new design is that there seems to be more total reading involved which requires less total attention span. Part of the challenge of longer passages is being able to keep focus for a whole page and being able to process a piece as a whole. With all passages limited to at most one or two paragraphs, skills pertaining to longer passages are no longer tested. As a test taker, I appreciated this change. At least for the limits of my mind, I found it easier to "load" less information into my working memory at a time. Interestingly enough though, even though I felt this new design was easier, my scores on this section were nearly unchanged. In 2017, I scored a 730 on this section and in my three practice tests before the 2026 SAT I scored a 730, 740 and 750, respectively. I've always been amazed at how consistent and reliable SAT scoring is. In most cases, at least in my belief, there isn't a "really hard" or "really easy" test. The question writers have really mastered the art of writing a consistently fair and accurate exam at assessing students' skills in the areas they've chosen to

assess. When I think about the paragon of standardized tests, I think of the SAT. Whether you love it or hate it, you have to admit that it measures something and it measures it extremely consistently, which is the main objective of any test.

Upon further inspection, I did notice some other modest changes on both sections. First, in the Reading/Writing section, due to the passage redesign, a natural side-effect was that questions on particular types of topics could be grouped together. For example, the questions about the usage of Standard Written English were contiguously located, as were questions analyzing author's intent. I felt like there were more scientific passages and data to interpret in the Reading/Writing section in the past. More so than 2017, I felt as if the topics mentioned in the question were topics that I was familiar with from my outside reading. Compared to when I took the test for real in 1992, I feel that this section focuses far more on logic and reading comprehension than it used to and relies less on memorization of vocabulary, though the latter does matter a fair bit still. I had forgotten about the length. In 2017, this section consisted of 96 questions. Today, this section only has 54 questions (of which 50 count and 4 are experimental). In addition, instead of an unequal split of questions between modules in the past, the current exam has the same number of questions (27) and the same time limit for each module (32 minutes). Both math modules also have the same number of questions (22), the same time limit (35 minutes), and allow calculator use. The old test had one module of 20 questions and another module of 38 questions, with the latter allowing calculator use, but not the former. From the perspective of student preparation and expectations, keeping the format of each module within a section the same is better for the student, since a student can devote less bandwidth focusing on the different formats between the different modules.

The math section seems to have a few specific ideas that receive far more focus now than back in 2017. For example, I don't remember any of the old tests focusing on the conceptual meaning of each portion of an exponential equation of the form  $f(x) = a(b^x)$ , where  $a$  and  $b$  are constants. This time around, for each of the three practice tests I took before the 2026 exam, there were multiple questions which focused on this concept. A second type of question (that was very obvious) were questions where you can find the answer they require (say they ask you to find the value of  $7x + 6$ ) and it's much faster to do so without ever finding the defined variable in the question ( $x$ ). I've seen many of these from the math contest world, where they are better obfuscated. On the SAT, at least to someone with my experience, it was painfully obvious the way they are stated that you're not supposed to ever find  $x$  and that you can directly find the value of the expression they are asking for. I am glad this has entered the SAT; understanding that you can parameterize an equation (let  $A = 7x + 6$ , for example) and then work with the equation in  $A$  is a very, very important mathematical skill. A third topic that showed up a great deal on each of my practice tests which I don't remember from 2017 are singularity conditions with a system of linear equations (under which situations do a pair of linear equations have either 0 or an infinite number of solutions) as well as the number of real roots of a quadratic equation for which you have incomplete information (actual value of coefficients aren't given, but some partial information is.) Certainly, each of these three topics is extremely teachable; I suspect that the SAT question writers decided that if they added these topics, schools would start emphasizing the more. What's interesting is that when I was taught this material these issues weren't the focus, but each of these

types of questions could be reasoned out from what I was taught (which is what I did when I saw these sorts of questions.) On a final note about the math section in general, I felt the numbers involved (now students can use a calculator for both modules of the math section) were uglier. As someone who loves writing non-calculator questions where after some very doable algebra on paper the answer resolves to something clean, this made me a bit sad. Personally, I decided not to bring a calculator and just used the built in calculator just so I could experience what a slightly unprepared student would get to see. Either it's quite clunky or I don't know how to properly use it. I was able to type in what I needed to, but I was slow at it.

I can't discuss the details of the questions I received on the real test (yes I read that portion of what I agreed to!), but I can talk about the day of the test and the feeling and timing of doing the questions. Anya and I showed up right at 7:45 am in the parking lot we were directed to on our testing ticket at Boone High School. There was already a large group of students gathered outside the school when we walked up. Per Anya's request, we stayed in the back. It's likely that someone made an announcement right before we got there, but since everyone else was waiting, we did too. As the gate of the school was opened, others seemed to know where they were going, but Anya and I did not. As we finally made it to the front gate of the school, we could see a sign that had every test taker's name with a room number following it. Being unfamiliar with the school (I should be familiar since my older daughter attended Boone for four years but the room numbering system is beyond bizarre), we just followed the herd and did our best to read the signage, which was mildly confusing. We were assigned to rooms 310 and 312, but then there was a chart outside one of the buildings stating that 310 really referred to room 10-219 with a similar listing for 312. Both of us figured it out eventually and got into the proper lines for check in. I didn't see Anya after that until the test was over. I waited in line patiently and everyone was quiet, patiently waiting in line until they showed their ID and testing ticket to the room coordinator (a teacher at the school). Each student was assigned a specific seat in the classroom. When we entered, information was projected on the main classroom screen asking us to log into Bluebook (the application on which the test is given) and complete the check-in steps. This was fairly straight-forward. The only issue occurred when one student's computer wasn't booting up. (Most students likely bring their own personal devices while some students bring their county-issued laptop.) The room coordinator asked the student to hold tight while she read out her required script, which was quite short compared to old scripts I remembered. Once she finished, let everyone in the room who was ready begin the exam and asked the student having computer issues to go to a central location to get help with her laptop. I am not sure what they did, but I suspect they just lent her one of the county laptops set up with Bluebook so that she could test. She came back about 20 minutes later and started the test.

Since the test is on the computer and the exact timer starts when students click on the button in their application, instead of all students starting at the same time and all students ending at the same time, students start and finish each section at slightly different times. If after completing the check in steps, you want to take a deep breath and pause for a few moments, you can. If you want to dive in ASAP while the coordinator is talking, I suspect you can. (I didn't do this so I can't know for sure, but this is just a guess.) As soon as she gave us the go ahead, I clicked the button to start the test (no real nerves here since my score doesn't really influence anything in my future).

The real test is nearly identical in format to the online practice tests. While I did one practice test on paper, I did two full practice tests in Bluebook. **I can't emphasize enough how important it is for ALL students to do at least one practice test within the application.** It takes some time to get used to the interface, where all the necessary information is, etc. I suspect students will do better if they naturally know where the timer is, where the question number is displayed and so forth without having to randomly look around for these items. These items are immensely helpful and it's important, at least for students who might come close to using the whole time, not to lose time identifying where these elements are. From an advice perspective, I feel it's absolutely critical to minimize the bandwidth spent on any issues not related to solving the questions on the test. The more one can take care of all of these outside aspects without use of their consciousness, the better. It takes a bit of time to get fully familiar with the keypad used to enter the answers for short answer (not multiple choice) math questions and if you choose to use the built in calculator, it's useful to get used to getting the calculator to display, hiding it and moving it. While these aren't big issues, if a student wants to maximize their score, it's best to be more familiar with using the features of Bluebook. One single practice test should be enough for most current students to acclimate themselves with these components of Bluebook so that they don't waste any time on test day. (For old folks like me, taking the second practice test actually improved my familiarity with the application. I got better using the calculator and faster at switching to the scientific mode when I preferred it. For the young students, it's most likely that multiple practice tests spaced out with targeted learning will be most beneficial for the purpose of learning new material relevant to the test and improving scores on specific question types. It's unlikely for me that the second practice test had a significant effect on my real test score since I am almost certain I learned nothing new in between the two practice tests. Though I will say that missing one math question on two of my three practice tests made me double check every answer on the real test day; something that I didn't do during any of the practices. On the real day, I am fairly certain I caught one error and fixed it due to my double checking.)

Once I got going on the first Reading/Writing module, as mentioned, it was clear that the practice tests online helped immensely. I rolled into the rhythm of reading each prompt carefully, identifying what type of question it was and looking for the critical information in the passage to answer the question posed. I got a tiny bit rattled when I couldn't figure out an early question. For whatever reason, none of the answer choices made sense to me. In these situations, it's critical to just mark it and move on, which after I caught myself spinning (plugging in all four answer choices twice) I was able to do. Once I completed the whole section, I had about nine minutes left and went back to the marked question. This time, for whatever reason, I very quickly "got" it (or at least I think I did) and was reasonably confident in my answer. It was unclear to me why I was having trouble the first time around. I think this happens sometimes, where, for whatever reason, your brain slightly loads the wrong information into its RAM (random access memory) and you are blind to the fact that this is the case. When you step away from a question and later come back to it, that old RAM has been purged and perhaps you process reading the prompt more accurately the second time around. I answered the question and just sat quietly for the remaining eight minutes left. I didn't practice this, but I would say that this is very easy to do. When everyone else around you is being quiet and respectful, it's part of human nature (especially when you have no other electronics with you), to just sort of sit and relax. I am glad that when I took each of my practice

tests I just moved on immediately. I can see no benefit in practicing what it feels like to wait in this particular situation. (What's interesting is that for the programming team at UCF, we have actually practiced this very skill in anticipation for an important contest and I do think in that context it has value, which is why I considered the proposition for SAT preparation.) Once my timer ran out, it immediately moved onto the second Reading/Writing module. I had gotten used to this module being harder than the first where right off the bat, in my practices, I received several passages early on that were written at a clearly higher level than the first module passages. On the real test day, these passages did seem harder, but not to the same degree. I ultimately marked 4 of these questions but decided to put tentative answers for 3 of them on my first read through the questions. I also went slower naturally as some of these passages were longer and some contained large amounts of data in charts. This time, I got to the five minute warning (the app has a pop up that tells you there's five minutes left in a module) before I got through my first read through. I finished the read through with about four minutes left and then returned to my unanswered question. While I am not confident with the answer I gave, I did have time to reconsider it and did provide an answer. For the other three, I just barely had time to check them, and while I was still waffling on each of them, I just decided to stick with what I initially answered since I didn't have clear evidence to change my answer. The timer went off pretty much right when I was done double checking the last marked question. The app then tells you that you have a 10 minute break and before the test the room proctor mentioned that we would be allowed to get up in between sections but not to make any noise since others were testing. We were supposed to take our IDs with us only and could step out into the hallway and go to the bathroom. I waited for 2 - 3 minutes while several students in the room left. Once the rush had calmed down, I decided to go to the bathroom. This was the first time I heard anyone talking. The students were good; they were not talking about the test. I came back with about 5 minutes left on the timer and changed the position of a few things on my desk to get ready for the math section. The app goes into the math section automatically at the end of the break (or this is how I remember it). One big difference during the real test and my practice test was that only a single sheet of scratch paper was given to me during the real test. When I did my practice test the day before, I used about 8 sheets of scratch paper. (I am a big believer in seeing math on paper, being equations, numbers, calculations or diagrams.) I immediately adjusted my plan to write in a different manner, still neat, but I intentionally didn't write everything I would normally write and I made a conscious effort to write smaller. (This was easy enough for me to do because in high school I spent a good deal of time practicing how to change my handwriting and organization of math on paper for tests. This improvement allowed me to do as well in mathematics competitions in high school as I did and **I strongly encourage current students to formally practice HOW they write math out on scratch paper to reduce errors due to misreading their own writing or miscopying something.**) The types of questions on the first math module were quite similar in type to what I had seen on practice tests and I was able to get through everything even with slowing down with 14 minutes left. I decided to recheck my work on all of the questions and still had about 6 minutes left until I was allowed to start the next section. I sat for a couple of minutes and realized that I had used a full one side of the sheet of paper given to me for scratch paper. On my practice tests, I easily used at least twice as much paper on the second module compared to the first module. I decided it was likely the case that I would run out of paper during the second module and then have to raise my hand to ask for more paper. If I did that during the module, I would have wasted

time. Thus, with about 3 minutes left in the first module's timer, I raised my hand and asked for paper. As far as I could tell, I was the only person in the room to do this, even though it's quite likely that I am more adept at doing math in my head than anyone in that room. **(This speaks to a very critical point I learned early on in high school. Do NOT be afraid of using paper for math and do NOT try to "squish" equations into the corner of a page.)** Since I stuck out like a sore thumb, the room proctor addressed me as "Sir" and gave me another sheet of paper. I quickly marked my name on that sheet of paper (these were part of the instructions) before the second module began. Once the second math module began, I went to work. I ended up marking 3 questions on this module. There was one, which I knew how to do, but I just had a feeling that it was worthwhile for me to recheck it. There was another one, where I initially misread the problem and got a strange answer. I decided to redo the problem before moving on (since it was unclear how I was supposed to key in the strange answer I got) and realized that I completely misread something. Because I had misread something, I still put that problem on my recheck list. Once I finished going through the questions, I went back to my three marked problems. In fact, on the one I had a fishy feeling about, I realized that I had misread something. (It's less misread and more that my brain didn't process something painfully obvious clearly communicated in the question.) I solved the question 100% from scratch, got a different answer and changed my answer sheet. I went back to the other two marked questions, and decided that my answers were fine for those. On one of those two questions, when I had first done it, I ended up solving it in a different way than the intended solution, which made my solution path more complicated. I ultimately used an intuitive calculus argument to support that initial answer. In spite of the fact that I hadn't thought of the intended solution path, I had enough "back up" knowledge to "fight through" the problem in two different ways to support the answer I chose. As a consequence, I marked it. When I went back to it, I discovered the much easier intended solution and verified that it matched the answer that my other two harder methods produced. **While it's not strictly necessary, understanding multiple ways to solve a problem can create redundancy, so that in situations where you "flake out" and fail to see the proper way to solve a problem, you still have some chance of solving it.** In engineering design this is typical; backup mechanisms are built into machines so that if one mechanism fails, a back up mechanism can temporarily provide that function. After the careful check of the three marked questions, I went back through all of the questions fairly quickly, and just double checked that I read the question posed correctly and that I agreed with the answers I had chosen. (When I do this, I don't resolve the math, but I do quickly check if the answer I gave was plausible and if the other answer choices can be eliminated. On ones where the math is easy enough to do in my head, I do redo the math without writing.)

After completing the test, I followed the instructions of submitting it, raising my hand, having my scratch paper collected and being released to go. I quietly walked out into the parking lot and since I didn't see Anya, waited for her until she came out. Since I had a few minutes, I started reflecting on my experience.

First, thoughts on the design of the test:

As I previously mentioned in the write-up, the test is extremely well-designed. In all likelihood, students will receive consistent scores on separate versions of the test if they don't learn new

material or practice in between taking those versions. The test does an excellent job of testing logical skills necessary for collegiate level work. It's important to be able to interpret charts and draw conclusions from unprocessed data. This is tested quite well on the Reading/Writing section. It's important to be able to follow a train of thought and understand the role of specific sentences within an argument; another skill that is tested in an efficient manner on the SAT. It's important to be able to process information from a wide variety of disciplines, which the reading passages test effectively. When reviewing questions I answered incorrectly on my practice tests, I do believe that I simply had trouble keeping track of all the information in my working memory to properly answer the question correctly. On a couple of items on the reading/writing section, I incorrectly identified the subject for subject and verb agreement. There were also instances where I incorrectly applied the rules for commas, semicolons and colons. I try to do these questions intuitively because I don't formally have a rule set I am conscious of for when each of these is supposed to be used (or not used). I suspect that if I properly spent the time to learn these rules and then practice them, I could reliably answer all of these usage questions correctly. But, I don't think there's any way that I could reliably answer all of the reading comprehension questions correctly because doing so would likely require me to have a slightly better ability to store all relevant information for these passages in my working memory, which I don't think is something you can quickly learn how to do. I fairly strongly believe that there are natural differences between the working RAM of different people and that this partially explains why some people are able to process certain types of information better than others. I am fairly certain that for different types of information, different portions of people's brain handles the processing, which is why different people find that learning in different subject areas comes more easily to them. On the flip side, I also very strongly believe that most people's upper limit of what they can do is much higher than they think. So many students who think, "oh I am not a math person" who end up scoring say a 600 on the SAT math section likely could score a 750 if they believed that they could improve their score via concerted effort. (Researcher Carol Dweck calls this a "growth mindset.") The type of concerted effort matters a good deal though. There are many students who spend many hours studying for the SAT but don't see a commensurate rise in scores. Preparatory courses do a mix of actually teaching the material and "teaching tricks" that work for the test, since the test is structured in such a reliable fashion. My belief is that it's largely better to actually learn the material the right way instead of focusing on tricks to eliminate answer choices or "plug in answers." Yes, these tricks help, but the problem is that they build the wrong mindset. They encourage students to give up learning the right way to solve the problem (which may very well be within students' capabilities) and try the tricks out either to (a) get lucky and get the answer quickly outright, or (b) at least eliminate a couple of answer choices so you have a 50/50. In the short term, using these tricks will improve one's score. But relying on them lowers a student's ceiling (best score they can get).

### **High Level Advice to Students Taking the SAT (Before the test)**

With these thoughts in mind, here is my advice to students preparing for the SAT:

1. In general, get in the habit of reading non-fiction periodicals, such as Time magazine, the New York Times or the Wall Street Journal. I was surprised at my surface level familiarity with topics in the passages, almost all of which came from my random reading that I was never "assigned" by anyone.
2. Start a few months in advance.
3. Take one or two practice tests.
4. Catalog the areas as best as you can that you missed problems.
5. Try to map those areas into specific skills you can study.
6. Find appropriate resources that cover those specific skills.
7. Read through notes and see if you can do practice problems related to those specific skills. (A lot of this is likely built into the Bluebook App. I didn't use it at a fine enough level to do this though.) This is what we call focused learning.
8. If you have friends or parents that might be able to help you understand topics or ideas that are difficult for you, reach out to them during this focused learning process.
9. Go back and take a practice test. Compare scores to your baseline and more importantly, look at the types of problems that you still got wrong. Evaluate the effectiveness of your focused learning.
10. Continue alternating between the two (focused and diffuse) learning on a reasonable schedule that is spaced out appropriately.

There will be some specific skills that will take a good deal of time to master, and particularly in math, the order in which you choose to improve on these skills matters, because some skills build on top of others naturally. Try your best to appropriately map out the order in which you choose to review mathematical topics so that you can understand the connections between different types of questions. What you shouldn't do is treat each question as its individual silo where you just memorize the process to solve that one question type. **Try your best to connect it to your general knowledge base.**

### **High Level Advice to Students Taking the SAT (A Couple of Days Before and Day of Test)**

1. Probably worth while to take a practice test a couple of days (or maybe early afternoon the day before) with conditions as close as possible to the real test. (Don't pause in the middle of a module, etc.) It's useful to have the "feel" of the test and its timing in your recent memory.

2. The day before the test, especially in the evening, take it easy. Hang out at home. Maybe watch some TV. No need to cram. It doesn't help. The recent practice test was likely helpful so that you're not out of sorts on test day.

### **3. Before you go to bed, double check that you know your Bluebook login and password.**

### **4. Plug in your computer to charge.**

5. Go to bed, reasonably early. Set your alarm, but the goal is that you sleep long enough that you're likely to wake up on time. You know yourself best, so set your alarm appropriately. All sorts of people have different habits when waking up; you should definitely make sure you follow whatever habit you have. For me, I wake up, change, go running and take a shower before I really get started for the day. I timed my wake up appropriately. The key is for you to do whatever your routine is on a regular day.

6. The only requirement I would make of students is to make sure you eat a reasonably nutritious breakfast that isn't too heavy. This advice is largely intuitive from my end. I know for a fact that without any food, your brain isn't likely to work as accurately. I also know with too much food, that there's actual science behind the term "food coma", which obviously can't be good for testing. If your regular breakfast is reasonable, I would say stick with it. If you sometimes skip breakfast or sometimes eat really large breakfasts, I feel like it makes sense to change your routine. (I could be wrong on this.)

7. When you arrive, **leave all electronics in the car.** There's no reason to jeopardize your score. (The only exception is an approved calculator.)

8. **Make sure to bring your picture ID, testing ticket and multiple pencils or pens.** (I always think it's good to have a back up just in case a pencil breaks or a pen runs dry.)

9. Aim to get to the test site at least 5 minutes before they tell you to. For us, they said show up at 7:45 am and gates close at 8:00 am. Even though we were there pretty much right at 7:45 am, we missed an announcement made. While we were fine, it's probably better to hear whatever announcements are made.

10. Once you're inside the site, just carefully read signs, follow directions, ask questions if necessary, and be quiet.

11. Once you get in, just follow the instructions given to you. With Bluebook, this part's a breeze. Though as previously mentioned, it's fairly critical that your computer is charged. The room we were in was not equipped to allow everyone to plug in. Three students asked if they could and they were accommodated, but had everyone asked, it would not have been possible.

### **Thoughts on how this will affect me**

I still remember in 2004 reading an interview with the head of the ETS (Educational Testing Service) and the design of the SAT. In the interview, he mentioned that he took any changes to the test very seriously because he knew that if he changed something about the test, reasonably quickly high schools would adapt what they teach, nationwide to give students the skills to answer questions for the new format. In some sense, if you design a test well, then you can modify what and how people study and learn, for the better. So he saw the SAT as a tool that could improve education. If he could figure out the types of questions that would encourage teachers to teach the logical thinking skills and quantitative skills that he felt were important, then he could have a huge effect on the overall country's learning.

When I took over being in charge of the Foundation Exam at UCF from Dr. David Workman in 2009, I took to heart the key lessons from that article. Although students didn't love the exam, I knew that I could influence what they study and how they study by how I choose to design the exam. Over time, I've made small, incremental modifications to the format, for various reasons, and each time I entertain a change, I definitely carefully think about how that will modify what students are studying and how. Ultimately, my goal is to make a test that can't be "gamed" with a "cheat code." I want to design a test for which the best way to prepare for it is to learn the fundamental skills that I think are important for a computer scientist.

The big weakness in my design compared to the SAT is my fluctuation of question difficulty. From one exam to the next, a particular question (say the one on linked lists) might dramatically change in difficulty. For me, what I do is try to balance this out over the course of the exam. So, if the linked list question in this exam is harder than the previous exam, then perhaps I'll make the Hash Table question easier than the one on the previous exam. Similar to the SAT where raw scores are mapped to final scores so that difficulty can be adjusted for, I also adjust the passing line for the Foundation Exam to account for an unusually difficult or unusually easy exam. After taking the SAT this time though, there is some small part of me that is thinking about working on keeping the difficulty of corresponding questions more consistent. (Of course, the reason this never happens is that literally one of my favorite parts of my job is coming up with creative test questions. When I come up with a good one, I can't help myself but to put it on an exam, so that I can see how many students can figure it out. My curiosity is just too high. On very rare occasions when I am almost certain no one will answer a question correctly, I'll leave it off of an exam.)

I do try very hard to keep some questions consistent, and I think students who study properly are able to identify which of the 12 questions (there are a few) tend to be very consistent in both style and difficulty.