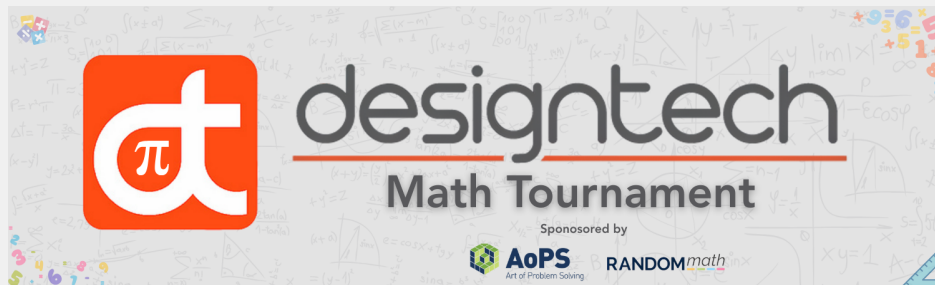




DESIGN TECH MATH TOURNAMENT



OFFICIAL HANDBOOK

Sunday, March 8th, 2026

*Design Tech High School
Redwood City, California*

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Competition Overview

Introduction

The **2026 Design Tech Math Tournament (DTMT)** is a competitive yet inviting middle school mathematics competition hosted by students from the Design Tech High School Math Club. Taking place on the Oracle campus in Redwood City, California, this event brings together talented young mathematicians from across the region.

The competition will be held in person at Design Tech High School, featuring a variety of problems across multiple rounds with the opportunity for prizes and recognition, followed by guest speakers and an activities session.

Competition Date: Saturday, March 8th, 2026, 8:00 AM to 2:00 PM

Location: Design Tech High School

Registration Fee: \$7 or \$10, paid online (see below)

Contact: dtechmathclub@gmail.com

Register at: www.dtechmathclub.org/dtmt

Registration Information

Registration closes at **11:59 PM PST on February 25th, 2025**. A detailed guide on forming teams is available [here](#).

Important Details:

We have a capacity limit of **200 students**, so early registration is strongly encouraged. Students should be registered by their school's math coach or a teacher designated as the coach, who will be responsible for forming teams of 3 to 4 students. If you are homeschooled or your school cannot form a team, please register as an individual (see Forming Teams).

Registration Fee

To help fund DTMT and the Design Tech Math Club, we have a registration fee that varies depending on when you register. Coaches handle online payments on behalf of their teams. Thank you for your support.

- **Early Registration:** \$5 before January 25
- **Regular Registration** \$10 before February 25

Accessibility & Accommodations:

Students requiring accommodations (like wheelchair access) must notify the Design Tech Math Club at dtechmathclub@gmail.com at least 2 weeks before the event.

Student Eligibility Requirements

To participate in DTMT, all competitors must:

- Be currently enrolled in grades 6, 7, 8, or below (or homeschool equivalent) during the 2025-2026 academic year
- Be registered with accurate information, including name, grade, school, and emergency contact
- Have paid the registration fee
- Agree to uphold all competition rules and academic honesty standards
- Adhere to all safety, conduct, and behavioral guidelines throughout the event

The Design Tech Math Club deserves the right to void student participation or results if they are deemed to have violated these requirements.

Team Formation Guidelines

1. Teams should be formed in advance by the school's coach
2. Each team consists of **3 to 4 students** from the same school.
3. Schools may register multiple teams, but with different names (Team A, Team B, etc.).
4. Each student must be assigned to exactly one team.
5. Team rosters are finalized three days before the competition and should not be changed after this deadline except in emergency situations.

Individual Competitors:

Students whose schools cannot form a complete team may register as individuals. The registration process can be found *here*. The Design Tech Math Club will put you in a team with other individuals.

Competition Logistics

Competition Schedule

The competition runs from **8:00 AM to 2:00 PM**. Classroom assignments will be provided at check-in. Please arrive by 8:20 AM to allow time for check-in and orientation. Late arrival may affect your tournament experience. A pamphlet will be provided at the competition with the schedule and map.

Location	Time	Activity
Atrium	8:00 AM – 8:30 AM	Check In
Classrooms	8:30 AM – 9:30 AM	Subject Round 1
Classrooms	9:30 AM – 10:15 PM	Subject Round 2
Classrooms	10:15 PM – 10:30 PM	Break
Classrooms	10:30 PM – 11:00 PM	Team Round
Classrooms	11:00 PM – 12:00 PM	Sequence Round
Atrium	12:00 PM – 12:30 PM	Lunch Break
Classrooms	12:30 PM – 1:10 PM	Activities/Tiebreaks
TBD	1:10 PM – 2:00 PM	Awards & Closing

What to Bring

Before each competition, proctors will distribute scratch paper, answer sheets, and the test. During each round, only the use of pencils, pens, and erasers are permitted as writing utensils. The use of outside aids is strictly prohibited, including calculators, papers, and electronic devices, with the exception of rulers, protractors, and compasses.

Since this is a full-day event, we recommend students bring writing utensils, a water bottle, snacks, and anything they might need. Pizza will be provided for lunch consisting of the options Cheese, Pepperoni, Hawaiian, and Veggie. If you are unable to eat the provided lunch, please bring your own food. Students may not leave the Design Tech High School campus at any time unless granted permission by a supervising teacher.

Arrival & Parking

Address:

Design Tech High School
275 Oracle Parkway
Redwood City, CA 94065

Check-In:

All students must check in at the main entrance before check-in closes at 8:30 AM. We recommend that you arrive by 8:20 AM as arriving late may affect your tournament experience. Please note that March 8th is the start of Daylight Saving Time, so plan accordingly.

Drop-Off Procedure:

- Enter the Design Tech High School campus at the intersection of Marine Parkway and Oracle Parkway *here*
- Proceed counter-clockwise on Oracle Parkway
- Turn right into the designated drop-off loop

Parking:

- Enter at Marine Parkway and Oracle Parkway *here*
- Use the **Oracle Building 320 Parking Garage** (free parking)
- Drive clockwise on Oracle Parkway enter the garage

Information for Parents & Coaches

Parents & Guardians:

- Parents are warmly invited to attend the Closing and Awards Ceremony to support competitors, hear from speakers, and celebrate student achievement.
- To maintain a fair and focused testing environment, parents may not enter testing rooms or remain directly outside them during competition rounds.
- At this time, there are no structured activities specifically for parents during competition hours, so we do not advise parents to stay during the competition.

Coaches:

- Coaches play an essential role in preparing students for this tournament, and we value their expertise and commitment.
- During the event, coaches are responsible for their students outside of testing rooms, including during check-in, lunch, and transitions between rounds.
- Coaches must ensure that their students arrive on time to assigned rooms, follow competition rules, and maintain respectful conduct throughout the day.

Coach Activities:

- **Coach Social (during Subject Round 1):** Networking opportunity with other coaches and math educators. Drinks and refreshments will be provided.
- **Guest Speaker Session (during Subject Round 2):** Featuring a 45-minute presentation on math competition coaching.
- **Sequence Round viewing:** See your students compete and progress in Sequence Round on the live leaderboard in a dedicated room.

Rounds & Scoring

Competition Rounds Overview

DTMT consists of four main competition rounds and includes tiebreakers and activities. Here is a summary of all rounds.

Round	Time	Description
Subject Rounds 1 & 2	45 min each	Each round has 10 questions. Students select 2 subjects from Algebra, Geometry, Discrete Math, or 6th Grade Math.
Sequence Round	45 min	Teams solve 7 sets of 3 problems each, receiving the next set after submitting the previous one.
Team Round	20 min	10 collaborative problems. Teams submit a single answer sheet.
Tiebreakers	Varies	By invitation only for competitors tied in points.

Please note that all answers are integers between 0 and 999, inclusive.

Subject Rounds 1 & 2

Format: Two 45-minute rounds, each containing 10 questions.

Subject Selection:

During registration, students select two subject areas from:

- **Algebra:** Focus on algebraic manipulation, equations, and functions
- **Geometry:** Emphasis on plane geometry, angles, areas, and spatial reasoning
- **Discrete Math:** Combinatorics, number theory, logic, and patterns
- **6th Grade Test:** Easier test covering all of the above subjects. This may only be taken by 6th graders or below.

Details:

Students should arrive at their assigned rooms prior to this round. Problems are generally arranged in increasing difficulty, and competitors will have exactly 45 minutes to complete as many problems as they can INDIVIDUALLY. After the conclusion of both Subject Rounds, we will release solutions on our website.

Team Round

Format: 20 minutes of team collaboration with 10 problems

Details:

During the Team Round, competitors will sit together with their teams. All students will receive test papers, while there will be one answer sheet per team to submit. Teams will have exactly 20 minutes to complete as many problems as they can. Collaboration is limited to only with students in your team. After the conclusion of the Team Round, we will release solutions for both the Sequence and Team rounds on our website.

Sequence Round

Format: 45-minute team-based relay with 7 sequential problem sets of 3 problems.

Details:

In the Sequence Round, problems are released in sets of 3 with 7 sets total in increasing difficulty, the last of which consists of estimating problems. Teams will receive and submit sets in order from a designated proctor. Sets may only be completed one at a time, and teams cannot return to already-submitted sets. The format is similar to BMT's Guts Round. Collaboration is limited to only with students in your team.

Strategy Tips:

- Balance speed with accuracy and manage your time wisely
- Collaborate and communicate effectively with teammates
- Guess at the end to get to the estimation problems

Tiebreakers

Tiebreakers are only used when necessary during Activities to determine individual award placements. Ties will not be resolved if they do not affect our ability to rank top-performing individuals. Students will participate in a Countdown round-style tiebreaker. In this format, students solve 5 head-to-head questions, each within 45 seconds. The best of three advances.

Activities

Between the Team Round and Awards Ceremony, DTMT hosts the following activities for competitors to allow time for Tiebreaks.

Math Jeopardy: A fast-paced trivia challenge where students answer questions across multiple math topics, from algebra to geometry for a prizes.

Math Games: Engage in hands-on and interactive math activities, like logic puzzles and number challenges, designed to develop problem-solving, strategy, and teamwork.

Knot Theory: Explore the math behind knots with Stanford professor and 3x Putnam scholar Ciprian Manolescu.

Detailed Scoring Formulas

1. Subject Rounds (Maximum: 160 points per round)

Each student completes two Subject Round tests. For each problem q (where $q = 1, 2, \dots, 10$), the points awarded for a correct answer are:

$$P(q) = \text{round}(10 \times 1.1^{q-1})$$

This creates an exponential point structure:

Problem	1	2	3	4	5	6	7	8	9	10
Points	10	11	12	13	15	16	18	19	21	24

Base Score: All students receive 1 points for participating in each round.

2. Sequence Round (Maximum: 180 points)

The sequence round consists of 7 sets:

- Sets 1–6: Each contains 3 questions with increasing point values (5, 6, 7, 8, 9, 10 points per question)
- Set 7 (Estimation): 3 questions worth 15 points each

3. Team Round (Maximum: 180 points)

The team round contains 10 collaborative problems. Problem t (where $t = 1, 2, \dots, 10$) is worth:

$$P(t) = \text{round}(8 \times 1.17^{t-1})$$

This rewards teams for solving harder problems later in the set.

Problem	1	2	3	4	5	6	7	8	9	10
Points	8	9	11	13	15	18	21	24	28	33

4. Overall Team Score Calculation

The final team score is calculated by averaging three weighted components, each scaled to a maximum of 100 points:

- 1. Subject Rounds Component:** Average of all team members' combined Subject Round scores
- 2. Team Round Component:** The team's Team Round score
- 3. Sequence Round Component:** The team's Sequence Round score

The three components are averaged together to produce the final decimal team score out of 100. This ensures that both individual performance and team collaboration contribute equally to the final standings.

Problem Dispute Process

DTMT problems are reviewed by multiple staff members before the competition. However, if you believe an answer key contains an error or a problem statement is unclear, you may dispute the problem.

Dispute Procedure:

1. Discuss the problem with your teammates and coach to ensure your interpretation is reasonable.
2. During Lunch Break, visit the designated Disputes area.
3. Present your concern to a staff member with the problem or problem number, your interpretation, and why you believe the answer is incorrect.

The DTMT problem committee will review all disputes and make final decisions. If a problem is determined to have an error, all affected students will receive credit. Decisions are final and will be announced before the awards ceremony.

All Disputes must be made before 12:30 PM on competition day or they will not be considered.

Policies & Information

Academic Integrity Policy

DTMT is committed to maintaining a fair competition environment. All participants must uphold standards of academic honesty.

During individual rounds, students must work independently. Collaboration, communication, or sharing of answers with other competitors is strictly prohibited. Any form of cheating undermines the competition and will result in penalties.

Prohibited Actions:

- Using or accessing electronic devices during testing
- Communicating with other students during individual rounds or other teams during team rounds
- Receiving answers or help from another competitor
- Using any reference materials or notes

Allowed Materials:

- Writing utensils (pencils, pens, erasers)
- Geometric tools (protractors, rulers, compasses without calculators)
- Blank scratch paper provided by DTMT

Consequences:

If a student is found violating academic integrity policies, the entire team may face penalties. This includes potential score reductions of up to 75 points or complete disqualification from the competition. The decision will be made by the DTMT staff after review of the incident.

Safety & Conduct Guidelines

All participants must behave responsibly and respectfully throughout the competition.

General Conduct Expectations:

- Treat all staff, volunteers, coaches, and fellow competitors with respect
- Follow instructions from proctors and DTMT staff at all times
- Stay in designated areas during breaks and free periods
- Keep noise levels appropriate in hallways and common areas
- Clean up after yourself in testing rooms and lunch areas

Safety Rules:

- Students must remain on the Design Tech High School campus during the competition
- Report any injuries, medical issues, or safety concerns to staff immediately
- Students may not leave campus without parent/guardian permission
- Do not engage in dangerous or inappropriate behavior
- Follow all fire safety and evacuation procedures if announced

Parents and coaches are responsible for ensuring students understand and follow these guidelines. The DTMT staff reserves the right to remove any participant who violates conduct policies.

Cancellations Policy

The Design Tech Math Club deserves the right to cancel this competition due to any unforeseen circumstances. If you are unable to attend this competition, the Design Tech Math Club must be notified of any cancellations through email at dtechmathclub@gmail.com. Cancellations should not be made lightly as it ruins the competition experience for team members. No refunds will be offered.

Media Consent

By attending this event, participants and guardians consent to the capture and use of photographs and video recordings for promotional and educational purposes by the organizers. If you do not wish to be photographed or recorded, please notify organizers upon arrival. No compensation will be provided for the use of such media.

Awards & Recognition

DTMT recognizes top performers in both individual and team categories. Awards will be presented during the closing ceremony at 1:30 PM. Prizes will be announced at a later date, but include offers from our sponsors Random Math, Art of Problem Solving, and Texas Instruments.

Individual Awards:

- Top 10 individual competitors in each Subject Round test receive certificates
- 1st place winners receive plaques and prizes
- 2nd and 3rd place winners receive medals and prizes

Team Awards:

- 1st place team receives the DTMT Trophy
- Top 3 teams receive plaques and prizes
- All team members of top 5 teams receive medals

Tips for Competition Day

Here are some tips for DTMT that can be helpful for both new and returning students.

Before the Competition:

Review basic formulas and problem-solving strategies before the tournament. Arrive early to avoid the stress of rushing, and be sure to bring pencils and erasers.

During Individual Rounds:

Start by answering the easier questions first, then do the harder problems. If you get stuck on a problem for too long, move on and come back to it later. Always double-check your arithmetic before writing your final answer.

During Team Rounds:

Communication is important for team success. Assign problems based on each member's strengths. If someone finishes their problems early, they should help teammates with remaining questions.

Between Rounds:

Use break time to relax and recharge. Stay hydrated and eat snacks to maintain energy levels throughout the day.

Frequently Asked Questions

Q: Can I bring a calculator?

No. Calculators of any type are prohibited. All problems are designed to be solved without computational aids.

Q: What if I need to use the restroom during a test?

Raise your hand and a proctor will escort you. Your time continues running, so plan bathroom breaks during the scheduled break periods when possible.

Q: What happens if I arrive late?

Late arrivals may not be admitted to rounds already in progress. If you arrive after 9:30 AM, you will not be allowed to participate in the remaining rounds.

Q: Can I leave campus during lunch?

No. All students must remain on campus for the duration of the competition. Lunch is provided.

Q: Will solutions be posted?

Yes. Solutions for all problems will be posted at dtechmathclub.org/dtmt following each round.

Q: Is food provided for students with allergies?

We provide vegetarian and vegan pizza options. Students with severe allergies should bring their own lunch to ensure safety.

Contact & Support

For questions about DTMT, contact the Design Tech Math Club through the following channels:

Email: dtechmathclub@gmail.com

Please email us for a quick response. We will get back to you within 24 hours.

Website: www.dtechmathclub.org

The website contains registration links, past competition materials, and information about our club.

For questions on competition day, ask any staff member wearing a DTMT badge. Staff will be positioned throughout the building to assist with directions, logistics, and questions.

Staff & Sponsors

Thank you to our sponsors for making this competition possible:



If you would like to sponsor the Design Tech Math Club, learn more at www.dtechmathclub.org/sponsorships.

Special thanks to our volunteers, proctors, and problem writers who have invested countless hours into planning and executing this tournament. DTMT would not be possible without the support of the Design Tech High School administration, club advisors Ms. Dy and Mx. Atkinson, and the dedicated members of the Design Tech Math Club.

We look forward to seeing you on March 8th, 2026!