

Important: All volunteers supporting regular season events in the United States and Canada must be screened and assigned using the Volunteer Management System and are required to complete their certification test using the [online volunteer certification](#) system.

This test is provided publicly for team use and volunteer certification as needed at events outside of the United States and Canada.

Revision History	
Revision	Description
V25-26.1	Initial 2025-26 Season Release
V25-26.2	Clarified wording on Q15
V25-26.3	Q19, Q20 updated. Revised up to Team Update 09.
V25-26.4	Q18 & Q19 Answer Key updated per Team Update 10.

Questions

- Q1. The Competition Manual as well as the latest Team Updates should be reviewed prior to each event.
- A. True
 - B. False
- Q2. If a REFEREE disagrees with a rule as written in the Competition Manual, they may choose not to apply that rule if they notice a violation of the rule.
- A. True
 - B. False
- Q3. REFEREES can review a team's video replay of a MATCH, just as a reference.
- A. True
 - B. False
- Q4. When does a REFEREE answer a student's question?
- A. Whenever they ask.
 - B. Never. Point them to the Question Box, where the Head REFEREE will answer their question.
 - C. If it is a straight-forward logistical question (e.g., Can I set the ROBOT down on the FIELD?), it can be answered by a REFEREE as soon as it is asked. Questions about MATCH results or hypothetical situations/violations should be asked in the Question Box to the Head REFEREE.

- Q5. If a REFEREE has a relationship with a team – such as parent, mentor, or alumni, the REFEREE can (select all that apply):
- A. Wear team apparel at the event.
 - B. Tell the team about information learned from their role as a REFEREE – e.g., pre-event training information such as the volunteer call, information about specific calls at the event.
 - C. Point the team to helpful resources, like the team Q&A.
 - D. Interact with a particular team in a greater capacity than other teams in social contexts (lunch, breaks, etc.) at an event while wearing REFEREE apparel.
 - E. Go with the team to collect awards earned at the competition.
 - F. Be friendly and respectful toward the team, as with all teams, at the competition.
- Q6. Which of the following are true about how ARTIFACTS that enter the top of the GOAL and pass under the archway are scored as CLASSIFIED or OVERFLOW (select all that apply):
- A. An ARTIFACT that enters the open top of the GOAL must be scored either as CLASSIFIED or OVERFLOW.
 - B. An ARTIFACT that passes through the SQUARE and transitions directly to the RAMP is scored as CLASSIFIED.
 - C. An ARTIFACT that passes through the SQUARE and does not transition directly to the RAMP is scored as CLASSIFIED.
 - D. An ARTIFACT that passes through the SQUARE and transitions directly to the RAMP is scored as OVERFLOW.
 - E. An ARTIFACT that passes through the SQUARE and does not transition directly to the RAMP is scored as OVERFLOW.
 - F. An ARTIFACT that passes through the SQUARE and rolls over an ARTIFACT before transitioning to the RAMP is scored as CLASSIFIED.
 - G. An ARTIFACT that passes through the SQUARE and rolls over an ARTIFACT before transitioning to the RAMP is scored as OVERFLOW.

- Q7. Which of the following are true about how ARTIFACTS are scored for PATTERN points (select all that apply):
- A. An ARTIFACT must have scored as either CLASSIFIED or OVERFLOW to score PATTERN points.
 - B. An ARTIFACT must be directly on the RAMP to score PATTERN points.
 - C. An ARTIFACT still in motion rolling down the RAMP at the end of the MATCH is ineligible for PATTERN points.
 - D. PATTERN points are evaluated throughout the MATCH.
 - E. ARTIFACTS must be retained by the GATE to be eligible for PATTERN points.
 - F. REFEREES enter the color and index of ARTIFACTS eligible for PATTERN points and the scoring system automatically determines the points earned.
- Q8. Which of the following ROBOTS qualify for LEAVE points (select all that apply)?
- A. ROBOT 1 does not move during AUTO but moves off the LAUNCH LINE immediately at the start of TELEOP.
 - B. ROBOT 2 moves from the LAUNCH LINE at the audience wall to the DEPOT during AUTO, where it remains until TELEOP starts.
 - C. ROBOT 3 moves from the LAUNCH LINE at the audience wall to the opponent's SECRET TUNNEL ZONE during AUTO, where it stays until TELEOP starts.
 - D. ROBOT 4 starts over the DEPOT moves 1 inch (~2.5 cm) so that it is no longer over the DEPOT or another LAUNCH LINE in AUTO.
- Q9. At the end of the MATCH, red ROBOT 1 is in the red BASE ZONE and fully supported by (on) red ROBOT 2. Red ROBOT 2 is in the red BASE ZONE but it is not supported by the TILE in the red BASE ZONE (select all that apply):
- A. Red ROBOT 1 earns fully returned to BASE points.
 - B. Red ROBOT 1 earns partially returned to BASE points.
 - C. Red ROBOT 1 does not earn any BASE points.
 - D. Red ROBOT 2 earns fully returned to BASE points.
 - E. Red ROBOT 2 earns partially returned to BASE points.
 - F. Red ROBOT 2 does not earn any BASE points.

Q10. At the end of the MATCH, red ROBOT 1 is fully supported by the TILE in the red BASE ZONE. Red ROBOT 2 is not in the red BASE ZONE but is contacting ROBOT 1 (select all that apply):

- A. Red ROBOT 1 earns fully returned to BASE points.
- B. Red ROBOT 1 earns partially returned to BASE points.
- C. Red ROBOT 1 does not earn any BASE points.
- D. Red ROBOT 2 earns fully returned to BASE points.
- E. Red ROBOT 2 earns partially returned to BASE points.
- F. Red ROBOT 2 does not earn any BASE points.

Q11. A REFEREE is trying to evaluate ROBOTS for BASE scoring, but the ROBOTS are still moving. At what point is the state of the ROBOTS evaluated?

- A. When the timer reaches zero
- B. 3 Seconds after the timer reaches zero
- C. When the ROBOTS are motionless
- D. Either when all motion stops or 3 seconds after the timer reaches zero

Q12. HUMAN PLAYER actions that do not result in a violation include (select all that apply):

- A. Holds 3 ARTIFACTS in their hands during AUTO
- B. Uses a gamepad during TELEOP
- C. Rearranges ARTIFACTS that started in the LOADING ZONE during AUTO
- D. Rearranges ARTIFACTS that are in the LOADING ZONE during TELEOP
- E. Places 3 ARTIFACTS into the LOADING ZONE at one time during TELEOP
- F. Removes a stuck ARTIFACT from a ROBOT during TELEOP
- G. Is in the LOADING ZONE at the same time as a ROBOT
- H. Drops an ARTIFACT into a ROBOT

Q13. DRIVE TEAM members may not interact with their OPERATOR CONSOLES during AUTO, with the following exceptions (select all that apply):

- A. To press the start button at the start of the MATCH
- B. To press the stop button before the end of AUTO
- C. To correct an unexpected ROBOT behavior
- D. For personal or OPERATOR CONSOLE safety

Q14. A ROBOT must be over the LAUNCH LINE tape to LAUNCH an ARTIFACT.

- A. True
- B. False

- Q15. A red ROBOT LAUNCHES an ARTIFACT during the end of MATCH buzzer, 2 seconds after the timer reaches 0:00. The ARTIFACT enters the open top of the GOAL after the buzzer ends. Which of the following is true (select all that apply):
- A. The ARTIFACT can score either CLASSIFIED or OVERFLOW points.
 - B. The ARTIFACT cannot score any CLASSIFIED or OVERFLOW points.
 - C. The ARTIFACT scores PATTERN points, if it comes to rest on the RAMP.
 - D. The ARTIFACT does not score PATTERN points, even if it comes to rest on the RAMP.
 - E. The LAUNCHED ARTIFACT earns no FOUL.
 - F. The LAUNCHED ARTIFACT earns a MINOR FOUL.
 - G. The LAUNCHED ARTIFACT earns a MAJOR FOUL.
- Q16. ROBOTS must no longer have powered movement after the end of TELEOP. This can be done by either pressing the stop button on the DRIVER STATION app or by discontinuing any operation of the ROBOT by the end of the MATCH period.
- A. True
 - B. False
- Q17. ROBOTS may not grasp, damage, or attach to any ARENA element or structure other than SCORING ELEMENTS.
- A. True
 - B. False
- Q18. HUMAN PLAYERS may introduce SCORING ELEMENTS in both AUTO and TELEOP periods of the MATCH.
- A. True
 - B. False
- Q19. In TELEOP, a DRIVER reaches ~1 foot (30.5 cm) outside the ALLIANCE AREA to retrieve a stray ARTIFACT that left the FIELD. The DRIVER immediately places the ARTIFACT back into the FIELD in their ALLIANCE'S SECRET TUNNEL ZONE. Which of these is the correct call?
- A. A VERBAL WARNING only.
 - B. MINOR FOUL
 - C. 2 MINOR FOULS
 - D. Either a MINOR FOUL and a VERBAL WARNING or 2 MAJOR FOULS, depending on if this is the first or a subsequent violation for leaving the ALLIANCE AREA.
 - E. MAJOR FOUL
 - F. No FOUL

Q20. What happens to ARTIFACTS that leave the FIELD?

- A. They are reintroduced approximately where they left the FIELD by FIELD STAFF.
- B. They are returned to a DRIVE COACH by FIELD STAFF.
- C. They are not returned to the FIELD.
- D. They are returned by FIELD STAFF to either the closest ARTIFACT tray or available DRIVER/HUMAN PLAYER.

Q21. In AUTO, a blue ROBOT drives to the red ALLIANCE'S half of the FIELD. Blue ROBOT drives through 3 ARTIFACTS on a SPIKE MARK, displacing them from their starting location. What is the penalty for blue ROBOT?

- A. MAJOR FOUL (1 MAJOR FOUL)
- B. 3 MAJOR FOULS (1 MAJOR FOUL per SCORING ELEMENT)
- C. 3 MINOR FOULS (1 MINOR FOUL per SCORING ELEMENT)

Q22. During the MATCH, a REFEREE notices an undamaged ROBOT grossly exceeding the horizontal expansion limits in G414. Which of these are correct next steps if the infraction was NOT determined to be used for strategic benefit?

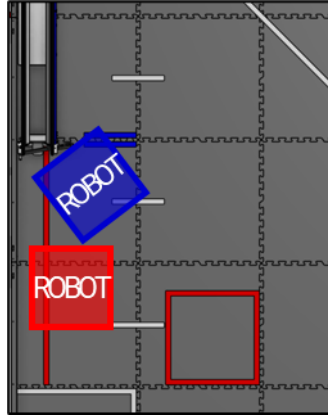
- A. If more than MOMENTARY, MAJOR FOUL
- B. MINOR FOUL
- C. Request reinspection from the LRI
- D. DISABLE the ROBOT immediately

Q23. Which of the following are true statements about operation of the GATE (select all that apply):

- A. A red ROBOT that opens the blue GATE earns red a MAJOR FOUL and awards blue the PATTERN RP.
- B. A blue ROBOT that opens the blue GATE and then releases it, allowing only some of the ARTIFACTS to be released, earns a MAJOR FOUL.
- C. A red ROBOT that opens the red GATE and then forcibly closes it, allowing only some of the ARTIFACTS to be released, earns a MAJOR FOUL.
- D. A red ROBOT that contacts the blue GATE with an ARTIFACT that it controls earns red a MAJOR FOUL and awards blue the PATTERN RP.

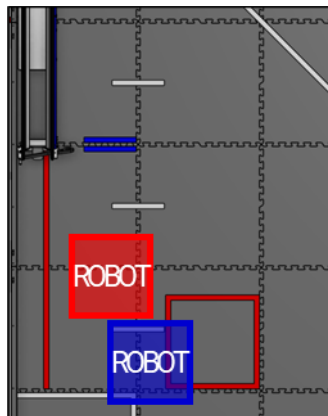
- Q24. A red ROBOT that controls no ARTIFACTS enters the blue SECRET TUNNEL ZONE and picks up 2 ARTIFACTS before proceeding to the LAUNCH ZONE to LAUNCH them into the red GOAL. The red ROBOT makes no contact with any other ROBOTS during this adventure. Which of these is the correct call on the red ROBOT?
- A. No FOUL
 - B. MAJOR FOUL
 - C. 2 MAJOR FOULS
 - D. MINOR FOUL
 - E. 2 MINOR FOULS
- Q25. A red ROBOT PINS a blue ROBOT for 4 seconds, backs up 2 ft. (~61 cm) for 2 seconds, and then moves back to PIN the same blue ROBOT for 2 more seconds. If the MATCH were to end at this moment, which of these is the correct call on the red ROBOT?
- A. No FOUL
 - B. MINOR FOUL
 - C. 2 MINOR FOULS
 - D. MINOR FOUL and MAJOR FOUL
- Q26. A red ROBOT PINS a blue ROBOT for 2.5 seconds and then moves away by 2 ft. (~61 cm) for 3 seconds. The red ROBOT repeats this PIN on the same blue ROBOT 6 separate times during the MATCH. Which of these is the correct call on the red ROBOT for these actions?
- A. No FOUL
 - B. 1 MINOR FOUL
 - C. 4 MINOR FOULS
 - D. YELLOW CARD
 - E. 5 MINOR FOULS and a YELLOW CARD

Q27. A blue ROBOT is in its own GATE ZONE operating its GATE when it also enters the red SECRET TUNNEL ZONE and contacts a red ROBOT. Which of these is the correct call?



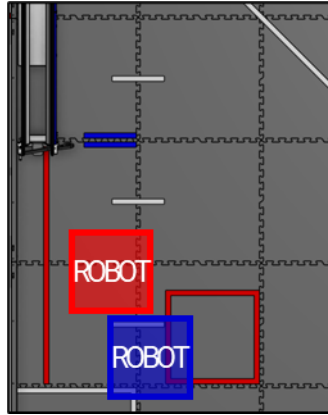
- A. No FOUL
- B. MINOR FOUL on red
- C. MINOR FOUL on blue
- D. MINOR FOUL on blue and MINOR FOUL on red

Q28. During the last 20 seconds of the MATCH, a red ROBOT contacts a blue ROBOT that is in the red BASE ZONE and the red LOADING ZONE. Which of these is the correct call?



- A. MINOR FOUL on red
- B. MINOR FOUL on blue
- C. MINOR FOUL and MAJOR FOUL on blue, and the red ROBOT is awarded fully returned to BASE points
- D. MAJOR FOUL on blue, and the red ROBOT is awarded fully returned to BASE points.

Q29. Prior to the last 20 seconds of the MATCH, a red ROBOT contacts a blue ROBOT that is in the red BASE ZONE and the red LOADING ZONE. Which of these is the correct call?



- A. MINOR FOUL on red
- B. MINOR FOUL on blue
- C. MINOR FOUL and MAJOR FOUL on blue, and the red ROBOT is awarded fully returned to BASE points
- D. MAJOR FOUL on blue, and the red ROBOT is awarded fully returned to BASE points.

Q30. After the event is over, a REFEREE sees a post on social media from team members clearly asking about opinions on a call that REFEREE made at an event. The REFEREE should:

- A. Respond to the post in question.
- B. Comment about it elsewhere online, like on their private account.
- C. Privately email or message the team to clarify the ruling.
- D. None of the above.

Answer Key

Question	Response	Explanation	Rule
Q1	A	REFEREES are expected to be well-versed in the Competition Manual, including all Team Updates. REFEREES should review the latest Team Updates prior to an event.	Section 1.6, Referee Manual
Q2	B	REFEREES cannot pick and choose the rules they enforce. This leads to inconsistency between events and an unfair team experience. The Competition Manual is the REFEREES' commitment to the teams to ensure consistent and fair rulings at all <i>FIRST</i> Tech Challenge events.	Section 1.6
Q3	B	REFEREES should never review MATCH video (or images, renderings, etc.) at an event under any circumstances.	T201, Referee Manual
Q4	C	REFEREES are advised to avoid answering questions from teams beyond straight-forward questions. The intent is to provide a consistent and accurate answer to teams through an equitable process via the Head REFEREE.	Section 13.4, Referee Manual
Q5	C, F	While some REFEREES may have a conflict of interest with a team, they should never give the appearance of a conflict of interest – real or perceived, nor should they use their role as a volunteer to provide their team with a benefit.	Referee Manual
Q6	B, E, G	See ARTIFACT scoring conditions in 10.5.1. For G, the ARTIFACT did not move directly to the RAMP and is therefore scored as OVERFLOW.	Section 10.5.1
Q7	B, E, F	See PATTERN scoring conditions in 10.5.2 and the timing of scoring in 10.5.	Sections 10.5.2, 10.5
Q8	C, D	LEAVE is scored at the end of AUTO per 10.5. To qualify for LEAVE points, the ROBOT must no longer be over a LAUNCH LINE, including the DEPOT, at the end of AUTO.	Sections 10.5, 10.5.3
Q9	C, F	Neither ROBOT 1 nor ROBOT 2 is partially or fully supported by the TILE in the BASE ZONE, so neither is eligible for BASE points, per 10.5.3.	Section 10.5.3
Q10	A, F	ROBOT 1 meets the criteria listed in 10.5.3 for fully returned to BASE points. ROBOT 2 is not partially or fully supported by the TILE in the BASE ZONE, so it is not eligible for BASE points.	Section 10.5.3

Q11	A	Timing of ROBOT scoring for BASE points occurs at the end of the MATCH per 10.5.	Section 10.5
Q12	A, B, D, E, G, H	The roles of HUMAN PLAYER and DRIVER are effectively interchangeable this season. DRIVE TEAM members fulfilling a HUMAN PLAYER role may do any action listed that is not explicitly disallowed for DRIVE TEAM members, DRIVERS, or HUMAN PLAYERS.	G431 , G432 , G434
Q13	A, B, D	Allowed DRIVE TEAM member interactions with their OPERATOR CONSOLE are listed in G401.	G401
Q14	B	A ROBOT must be either in a LAUNCH ZONE or over a LAUNCH LINE in order to LAUNCH an ARTIFACT.	G416
Q15	A, C, G	The timing of ARTIFACT and PATTERN scoring is specified in 10.5 – both are scored after all ARTIFACTS come to rest after the conclusion of the MATCH. ARTIFACTS LAUNCHED after the end of TELEOP are subject to G404 FOULS but will continue to score if they meet the ARTIFACT/PATTERN scoring conditions after the end of the MATCH.	Section 10.5 , G404
Q16	A	See G404.	G404
Q17	A	See G413.	G413
Q18	B	See G432.	G432
Q19	B	MINOR FOUL for G432 – not entering the ARTIFACT into the LOADING ZONE. No other violations have occurred.	G428 , G432
Q20	D	ARTIFACTS that leave the FIELD are returned by FIELD STAFF (e.g., FIELD RESET) to the nearest ARTIFACT tray or DRIVER/HUMAN PLAYER that is available at the front of the FIELD (e.g., not driving a ROBOT) per 10.8. FIELD STAFF should avoid returning ARTIFACTS to DRIVE COACHES, as they cannot contact ARTIFACTS during a MATCH per G431. REFEREES should focus on MATCH play around the FIELD and designate other FIELD STAFF to retrieve and return ARTIFACTS.	Section 10.8 , G431
Q21	B	AUTO interference includes displacing pre-set ARTIFACTS that start on the opponent's side of the FIELD, at violation rate of a MAJOR FOUL per displaced SCORING ELEMENT per G402.	G402
Q22	B	Violations of horizontal expansion limits are specified in G414.	G414

		Note: there is no MOMENTARY exception for violations of horizontal expansion limits.	
Q23	A, C, D	GATE operation is limited by G417. Response options A and D are specified in G417.A and option C is specified in G417.B.	G417
Q24	A	If red picks up ARTIFACTS in the blue SECRET TUNNEL ZONE, no violations have occurred. Contact between opponents is required for G425 violations. As long as no other rules have been followed (G408, G416, etc.), no violation has occurred.	G425
Q25	C	PINNING is limited to 3 seconds per G422. The ROBOT must end a PIN by removing itself by 2 ft for at least 3 seconds. If that time has not been met, the PIN persists and has been going on for 6 seconds at the time the MATCH ends, for a total of 2 MINOR FOULS per G422.	G422
Q26	A	PINNING for less than 3 seconds is not a violation of G422. REPEATED PINNING that does not lead to a FOUL is not escalated under G422 or G211, even if the cumulative PINNING time exceeds 15 seconds. This is an allowed and permitted strategy.	G422
Q27	C	A ROBOT in its own GATE ZONE and also in the opponent's SECRET TUNNEL ZONE is not protected under G424, and any contact with an opponent that occurs results in a G425 MINOR FOUL on the ROBOT.	G424 , G425
Q28	C	A ROBOT in the opponent's LOADING ZONE that contacts the opponent earns a MINOR FOUL per G426. A ROBOT in the opponent's BASE ZONE in the last 20 seconds of the MATCH that contacts the opponent earns a MAJOR FOUL and the opponent ROBOT earns fully returned to BASE points per G427. Both of these violations can apply simultaneously.	G426 , G427
Q29	B	A ROBOT in the opponent's LOADING ZONE that contacts the opponent earns a MINOR FOUL per G426. Prior to the last 20 seconds of the MATCH, G427 does not apply.	G426 , G427

Q30	D	Once an event is over, the person's role as a REFEREE is over. They should refrain from any online commentary or communication with teams outside official channels.	Referee Manual
-----	---	--	--------------------------------