

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 <u>online volunteer certification</u> 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			

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. REFERES 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 time reaches 0:00. Which of the following is true (select all that apply):
 - A. The ARTIFACT scores either CLASSIFIED or OVERFLOW points.
 - B. The ARTIFACT does not 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. MAJOR FOUL
 - C. 2 MAJOR FOULS
 - D. Either a MAJOR 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. 3 MAJOR FOULS
 - F. No FOUL



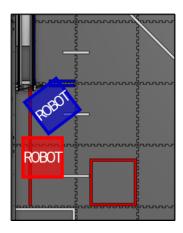
- Q20. What happens to ARTIFACTS that leave the FIELD?
 - A. They are reintroduced approximately where they left the FIELD by FIELD STAFF.
 - B. They are returned to a DRIVE COACH by FIELD STAFF.
 - C. They are not returned to the FIELD.
 - D. They are returned by FIELD STAFF to either a DRIVER or a HUMAN PLAYER that is available and nearby.
- 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.



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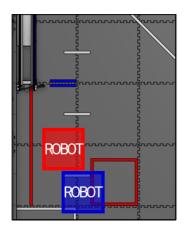
- Q24. A red ROBOT that controls no ARTIFACTS enters the blue SECRET TUNNEL ZONE and picks up 2 ARTIFACTS before proceeding to the LAUNCH ZONE to LAUNCH them into the red GOAL. The red ROBOT makes no contact with any other ROBOTS during this adventure. Which of these is the correct call on the red ROBOT?
 - 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?



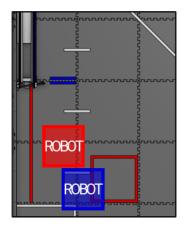
- A. No FOUL
- B. MINOR FOUL on red
- C. MINOR FOUL on blue
- D. MINOR FOUL on blue and MINOR FOUL on red

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.



Referee Certification Test

Answer Key

Question	Response	Explanation	Rule
Q1	А	REFEREES are expected to be well-versed in the Competition	Section 1.6,
		Manual, including all Team Updates. REFEREEES should	<u>Referee</u>
		review the latest Team Updates prior to an event.	<u>Manual</u>
		REFEREES cannot pick and choose the rules they enforce. This	
Q2	В	leads to inconsistency between events and an unfair team	
		experience. The Competition Manual is the REFEREES'	Section 1.6
		commitment to the teams to ensure consistent and fair rulings	
		at all <i>FIRST</i> Tech Challenge events.	
00	В	REFEREES should never review MATCH video (or images,	T201, Referee
Q3		renderings, etc.) at an event under any circumstances.	<u>Manual</u>
		REFEREES are advised to avoid answering questions from	Continu 12.4
04	0	teams beyond straight-forward questions. The intent is to	Section 13.4,
Q4	С	provide a consistent and accurate answer to teams through an	<u>Referee</u>
		equitable process via the Head REFEREE.	<u>Manual</u>
		While some REFEREES may have a conflict of interest with a	
0.5	C, F	team, they should never give the appearance of a conflict of	<u>Referee</u>
Q5		interest – real or perceived, nor should they use their role as a	<u>Manual</u>
		volunteer to provide their team with a benefit.	
	B, E, G	See ARTIFACT scoring conditions in 10.5.1. For G, the	
Q6		ARTIFACT did not move directly to the RAMP and is therefore	Section 10.5.1
		scored as OVERFLOW.	
67	B, E, F	See PATTERN scoring conditions in 10.5.2 and the timing of	<u>Sections</u>
Q7		scoring in 10.5.	<u>10.5.2, 10.5</u>
	C, D	LEAVE is scored at the end of AUTO per 10.5. To qualify for	Continue 10 F
Q8		LEAVE points, the ROBOT must no longer be over a LAUNCH	Sections 10.5,
		LINE, including the DEPOT, at the end of AUTO.	<u>10.5.3</u>
	C, F	Neither ROBOT 1 nor ROBOT 2 is partially or fully supported by	
Q9		the TILE in the BASE ZONE, so neither is eligible for BASE	<u>Section 10.5.3</u>
		points, per 10.5.3.	
	A, F	ROBOT 1 meets the criteria listed in 10.5.3 for fully returned to	
Q10		BASE points.	Coation 10 F 2
		ROBOT 2 is not partially or fully supported by the TILE in the	<u>Section 10.5.3</u>
		BASE ZONE, so it is not eligible for BASE points.	

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Referee

Certification Test

		Timing of ROBOT scoring for BASE points occurs at the end of	
Q11	Α	the MATCH per 10.5.	Section 10.5
		The roles of HUMAN PLAYER and DRIVER are effectively	
Q12	4 5 5 5	interchangeable this season. DRIVE TEAM members fulfilling a	0421 0422
	A, B, D, E, G, H	HUMAN PLAYER role may do any action listed that is not	<u>G431</u> , <u>G432</u> , <u>G434</u>
	G, H	explicitly disallowed for DRIVE TEAM members, DRIVERS, or	<u>G434</u>
		HUMAN PLAYERS.	
Q13	A, B, D	Allowed DRIVE TEAM member interactions with their	<u>G401</u>
		OPERATOR CONSOLE are listed in G401.	<u> </u>
Q14	В	A ROBOT must be either in a LAUNCH ZONE or over a	<u>G416</u>
Q. .		LAUNCH LINE in order to LAUNCH an ARTIFACT.	<u> </u>
		The timing of ARTIFACT and PATTERN scoring is specified in	
		10.5 – both are scored after all ARTIFACTS come to rest after	
Q15	A, C, G	the conclusion of the MATCH. ARTIFACTS LAUNCHED after	Section 10.5,
•		the end of TELEOP are subject to G404 FOULS but will	<u>G404</u>
		continue to score if they meet the ARTIFACT/PATTERN	
		scoring conditions after the end of the MATCH.	
Q16	A	See G404.	<u>G404</u>
Q17	Α	See G413.	<u>G413</u>
Q18	В	See G433.	<u>G433</u>
Q19	В	MAJOR FOUL for G433 – not entering the ARTIFACT into the	<u>G428, G433</u>
`		LOADING ZONE. No other violations have occurred.	<u>0.20</u> , <u>0.00</u>
	D	ARTIFACTS that leave the FIELD are returned by FIELD STAFF	
		(e.g., FIELD RESET) to the nearest DRIVER or HUMAN PLAYER	
		that is available (e.g., not driving a ROBOT) per 10.8. FIELD	
Q20		STAFF should avoid returning ARTIFACTS to DRIVE COACHES,	Section 10.8,
·		as they cannot contact ARTIFACTS during a MATCH per G431.	<u>G431</u>
		REFEREES should focus on MATCH play around the FIELD and	
		designate other FIELD STAFF to retrieve and return	
		ARTIFACTS.	
Q21	В	AUTO interference includes displacing pre-set ARTIFACTS that	0.400
		start on the opponent's side of the FIELD, at violation rate of a	<u>G402</u>
		MAJOR FOUL per displaced SCORING ELEMENT per G402.	
Q22	В	Violations of horizontal expansion limits are specified in G414.	0.45.4
		Note: there is no MOMENTARY exception for violations of	<u>G414</u>
		horizontal expansion limits.	



Referee

Certification Test

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.	<u>G417</u>
Q24	А	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.	<u>G425</u>
Q25	С	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.	<u>G422</u>
Q26	А	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.	<u>G422</u>
Q27	С	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.	<u>G424, G425</u>
Q28	С	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.	<u>G426</u> , <u>G427</u>
Q29	В	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.	<u>G426, G427</u>
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.	<u>Referee</u> <u>Manual</u>