

Name _____

The Safety Challenge of Autonomous Vehicles

Short Answer Key

1. Answer: "Edge cases" refer to rare or unpredictable situations that autonomous vehicles may encounter on the road. They are challenging because developing algorithms to handle these situations can be difficult.
2. Answer: Human oversight allows a human driver to take control of the vehicle if necessary, acting as a safety net in case the autonomous system encounters a situation it cannot handle.
3. Answer: Cybersecurity refers to the protection of computer systems and networks from hacking and cyberattacks. It is important for autonomous vehicles because they rely heavily on computer systems and connectivity, making them vulnerable to cybersecurity threats.
4. Answer: Public acceptance can influence the behavior of human drivers and pedestrians when interacting with autonomous vehicles. If the public trusts and accepts autonomous technology, it may lead to safer behaviors on the road.
5. Answer: Autonomous vehicles learn and improve through the accumulation of real-world data and experiences. As they gather more data, their algorithms and decision-making processes can become more refined and accurate.

