

## AI vs. Human Thinking - Case Study Answer Key

1. Summarize the situation in your own words. Sample acceptable answers:

- A self-driving car sees a child run into the street and must choose between stopping, swerving, or going forward.
- The car has three bad options: cause a rear-end crash, hit a cyclist, or hit a child.
- Both AI and a human would have very little time to make a decision.

2. AI's Perspective Sample acceptable answers:

- AI would calculate risks using data (e.g., probability of injuries, number of people affected).
- It would likely choose the option that causes the least harm overall.
- AI might not consider emotional factors like the value of saving a child over others-it follows programmed rules.

3. Human's Perspective - Sample acceptable answers:

- A human might slam on the brakes without thinking, acting on instinct.
- Emotions (fear, panic, the desire to protect a child) would influence the choice.
- A human might try to avoid hitting the child at all costs, even if it causes other risks.

4. Evaluation: Which choice is best? Sample acceptable answers:

- Option A (Stop immediately): Might be best because it tries to avoid hitting the child, even though it risks a rear-end crash.
- Option B (Swerve): Could be chosen if students argue protecting the child is most important, but they must recognize it endangers the cyclist.
- Option C (Go forward): Few students may argue this, but some might reason that it protects the adult cyclist and the driver behind, even though it sacrifices the child.

Any option can be acceptable as long as reasoning is supported with evidence from the scenario.