Teacher Answer Key

Case Study

1. Destiny rewatched the sugar-cutting video twice, which the algorithm interpreted as strong interest. Replay behavior is one of the two strongest signals in TikTok's system, so that action immediately flagged diet/body-image content as relevant. From there, collaborative filtering likely matched her to other users with similar patterns, flooding her feed with increasingly specific content in that category.

2. Answers will vary. Students arguing the algorithm violated trust might note that Destiny never consciously opted into that content category — the system exploited a single passive action. Students defending the algorithm might argue it is simply doing what it was built to do: optimize for engagement. Both positions should reference the concept of behavioral data signals and the algorithm's lack of awareness about user wellbeing.

Multiple Choice

1. D
2. A
3. A

Matching

1-D, 2-A, 3-E, 4-B, 5-C

Fill-in-the-Blank

1) test audience, 2) replay, 3) Digital Services

Short Answer (Sample Responses)

Q1: TikTok's system shows every new video to a small test group first and measures performance metrics like completion rate and engagement. If the video performs well, it gets pushed to a larger pool regardless of the creator's follower count. This means the algorithm rewards content quality and viewer response, not pre-existing fame.

Q2: Algorithms are designed to maximize a measurable goal — in TikTok's case, engagement and watch time. This is not the same as maximizing user wellbeing, mental health, or informed decision-making. The gap between what's engaging and what's healthy is where most of the real-world harms from social media algorithms originate.

Q3: Users can hit 'Not Interested' on unwanted content, use the Following tab for a non-algorithmic feed, and deliberately end scroll sessions rather than waiting for the app to close. These steps are hard to maintain because the algorithm is constantly learning and the app is designed to minimize friction between scrolling and stopping.