Teacher Answer Key

Case Study

1. Red flag 1: The claim was made by the company that sells the AI product without independent verification — the reading specifically lists this as a red flag because companies have financial incentives to overstate capabilities. Red flag 2: The claim uses strong causal language — '99% accuracy, outperforming top doctors' implies certain clinical superiority, not qualified language like 'shows promise in controlled testing.' Both flags indicate the claim requires significant scrutiny before being trusted.

2. The reading explains that benchmark scores often reflect performance on curated test images that may resemble training data more than real clinical scans do. For the 99% figure to be genuinely meaningful, the test images would need to be representative of real-world clinical diversity, the study would need to be peer-reviewed and independently replicated, and the AI would need to be tested on the specific cancer type relevant to Jordan's mother — none of which the article establishes.

Multiple Choice

1. C
2. D
3. C

Matching

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

Fill-in-the-Blank

1) expectations, 2) causal, 3) training data

Short Answer (Sample Responses)

Q1: A calibrated skeptic evaluates each claim on its merits — looking for peer review, independent verification, specific rather than vague claims, and acknowledgment of limitations. A cynic dismisses all AI claims as hype without evaluating the specific evidence. Faced with 'AI achieves 90% accuracy in peer-reviewed clinical trial,' a calibrated skeptic would say 'this deserves serious consideration, let me read the study,' while a cynic would say 'another AI hype story' and move on. The calibrated response is more useful because it allows recognition of genuine progress.

Q2: Company hype is driven by investor and market valuations — overstatement directly raises stock price and funding. Media hype is driven by clicks and advertising revenue — dramatic AI stories generate more engagement than nuanced ones. Researcher hype is driven by funding and prestige — framing modest results as breakthroughs attracts grants and citations. Media hype is arguably most harmful because it reaches the widest audience with the least technical context, shaping public perception more broadly than corporate press releases or academic papers.

Q3: Accept varied student responses. Strong answers will identify at least two specific flags from the reading's list, apply them accurately to the specific claim, and reach a reasoned conclusion about credibility rather than simply dismissing or accepting the claim. Bonus: students who note that no single flag determines credibility — that flags are probabilistic indicators requiring judgment — demonstrate strong critical thinking.