**Test Management & Leadership Action Plan**

**Scenario 1: Increase Test Automation Coverage from 40% to 80% in 3 Months**

First, assess the current automation coverage and prioritize high-impact tests for automation. Track progress by measuring test coverage and the number of automated tests executed each sprint. Allocate senior engineers for leadership and mentoring, while freeing up time for the team to focus on automation. The plan would involve auditing and automating critical tests in the first 2 weeks, followed by a broader expansion in the next 6 weeks, and finalizing automation in the last month. Risks can be minimized by prioritizing key areas and ensuring close collaboration with developers to avoid integration issues.

**Scenario 2: Frequent Test Failures in the CI Pipeline**

To resolve frequent test failures, start by identifying recurring issues in the CI logs and focusing on flaky tests and environment inconsistencies. Track test failure rates, identify flaky tests, and measure improvements in pipeline stability. Assign a QA engineer to focus on CI stability, working closely with developers to address root causes. The timeline would involve a 1-week analysis and environment fixes, followed by 2-3 weeks of improving test stability. To reduce risk, flaky tests can be retried, and environment consistency will be ensured.

**Scenario 3: Onboard 2 New QA Engineers with Limited Automation Experience**

To onboard new engineers, assess their current skills and tailor the training plan to focus on key automation tools and frameworks. Set clear metrics like time to proficiency and quality of test scripts. Mentor them through hands-on experience with real-world tasks, gradually increasing their responsibility. This would span 6 weeks, with structured learning in the first 2 weeks and independent tasks with feedback in the following weeks. Regular check-ins ensure they stay on track.