# Answer to Multiple Choice Question

To determine the p-value from a given confidence interval for the difference in means, I'll analyze the relationship between confidence intervals and hypothesis testing.

Given:

- 95% confidence interval for (μ₁ - μ₂) is (0.25, 2.40)

- Two-tailed test with H₀: μ₁ = μ₂ vs Hₐ: μ₁ ≠ μ₂

The key insight is that the null hypothesis value (μ₁ - μ₂ = 0) is \*\*not contained\*\* within the confidence interval (0.25, 2.40), as 0 < 0.25. This means we would reject H₀ at the α = 0.05 level.

For a two-tailed test with significance level α = 0.05, the p-value must be less than 0.05 for us to reject H₀. This is precisely the relationship between confidence intervals and hypothesis tests: when a (1-α) confidence interval excludes the null hypothesis value, the corresponding two-tailed test will reject H₀ at significance level α.

Since the 95% confidence interval excludes zero, we know that p < 0.05.

The correct answer is (B) < 0.05.