Homework Assignment 4

Problems from Text: 4.6, 4.7, 4.8, 4.12, 4.16, 4.18, 4.21, 4.26, 4.29, 4.32, 4.36, 4.38, 4.40, 4.45, 4.46, 4.47, 4.48, 4.52, 4.55, 4.56, 4.58, 4.59, 4.60, 4.61, 4.64, 4.65

Special Note: As one of my research areas is directly related to problem 4.56, I wish to extend the problem a bit. Derive an expression that identifies the optimal pool size k^* that minimizes the expected number of tests.