complete graph K_6
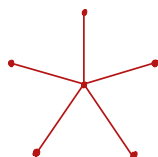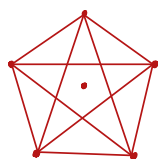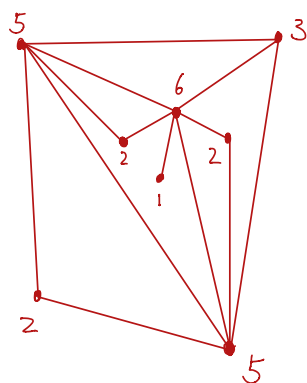

star graph S_6

complement of S_6

$(1, 2, 2, 2, 3, 5, 5, 6)$