

17. General Strong is in the process of determining a strategy for the army. Intelligence has reliably narrowed down the location of an upcoming attack to three areas. The general's staff has informed him that the probabilities of attack at the three areas are 0.5, 0.3, and 0.2, respectively. Suddenly, a report arrives at army headquarters indicating that the enemy is taking certain actions (call these actions event  $E$ ). A new round of consultations with his staff leaves the general with the feeling that - depending on whether the enemy plans to attack at locations 1, 2, or 3 - the probabilities of action are 0.6, 0.25, and 0.15, respectively. With this information, how can the general revise his initial probabilities concerning the location of the next attack from the enemy? That is, based on this new information, find the revised probability of an attack for each of the three locations.