Table 2.2. Joint Distribution of Weather Conditions and Commuting Times

 Rain (X=0) No Rain (X=1) Total

|  |  |  |  |
| --- | --- | --- | --- |
| Long Commute (Y=0) | 0.15 | 0.07 | 0.22 |
| Short Commute (Y=1) | 0.15 | 0.63 | 0.78 |
| Total | 0.30 | 0.70 | 1.00 |

Use the probability distribution given in Table 2.2 to compute (a) E(Y) and E(X); (b) σ2x and σ2Y; and (c) σXY and corr(X,Y).