Joint Distributions

Sample Question The random variables X and Y have the following joint distribution

| | Y =0 | Y =1 | Y=2 |
|------|------|------|-----|
| X=0 | 0.2 | 0 | 0.2 |
| X=1 | 0 | 0.2 | 0.1 |
| X =2 | 0.1 | 0.1 | 0.1 |

- ► Calculate the marginal distributions of X and Y.
- Calculate the coefficient of the correlation between X and Y.
- Are the random variables X and Y independent?