1. A and B have the same mean productivity score of 75 based on their probabilistic forecast distribution. For potential employee A, the distribution is more centered and the variance is lower compared to potential employee B. In terms of performance, A would be more stable than B and A has a much larger probability of sticking around 75, which is the mean. However, B has certain probability and actually larger probability of reaching a high productivity over 78 than A. A is stable but has little chance to reach a high productivity and thus makes him less potential in terms of development. For a start-up, B would be more attractive. A seems more attractive to well-established big firms.

2. This is an easier choice due to the fact that B has overall higher productivity than A. Again, A is more stable in terms of productivity since the probabilistic forecast has a small extreme deviance. However, A has almost no chance to reach a productivity higher than 65 while the lowest productivity of B hardly goes below 70. The probabilistic forecast for B has higher variance for sure, but B yields higher productivity in general. Therefore, B would be more attractive to most companies. In real world, it is also possible that B requires more compensation than A does based on the level of their mean productivity. Then A would worth the money more than B since A is more stable.

3. The probabilistic forecast is actually low biased but has high variance. The forecast method probability took smaller k or r. That’s why the prediction based on test data has more centralized distribution shown in the plot.

Answer and Adjustment:

1. equal probability for B to get a as high productivity as 80 and a as low productivity as 70.

3. The forecast is biased