1. Section 8.1, #2.

2. Section 8.1, #14.

3. Section 8.2, #3. Also calculate $P(X + Y = k)$ for all $k = 2, 3, 4, \ldots$.

4. Section 8.2, #6. Note that $\max(X, Y)$ is the function that outputs the larger of $X$ and $Y$, and $\min(X, Y)$ means the smaller of $X$ and $Y$.

5. Section 8.2, #13.