1. Rather complicated problem, but not bad if one is persistent. The probability in question is $P(L_2 = 1|A_1 = 0)$, where $A_j$ is the number who alight at stop $j$. One must then evaluate $P(L_2 = 1$ and $A_1 = 0)$ and $P(A_1 = 0)$, by enumerating the various probabilities.

2. Straightforward application of the mailing tubes.

3. Straightforward application of the mailing tubes.

4. No need for the mailing tubes here. To find $P(S = 12|T = 2)$, note that $T = 2$ means one of the pairs (1,1), (2,2),..,(6,6). All are equally likely, so the conditional probability is 1/6. The opposite probability is 1.