1. Choosing x

   (a) (*Person 1:*) Tear five small pieces of paper, and write down numbers $1, 2, 3, 4, 5$.

   (b) (*Person 2:*) Fold each paper so that the number written on it is not visible.

   (c) (*Person 3:*) Shuffle the chits, and chooses one chit at random.

   Let x denote the chosen number. Record x in the box: $\boxed{}$.

2. Consider the experiment of rolling a die and (choose) specify an event from that experiment which occurs with probability $x/6$. *All three persons together* decide on that event, and let it be called B. Write out the description of the event B in the box below:

   $\boxed{}$.

3. The set of vertices for the graph you are about to construct are $\{1, 2, \ldots, 10\}$. The graph has no self-edges (i.e Self-loops). What is the total number of possible edges ?

   Record answer in the box: $\boxed{}$

4. Construct the *random* adjacency matrix A for the graph as follows. For each pair $1 \leq i < j \leq 10$:

   (a) Roll your die and observe if the event B has occured.
   (*Take turns with each person Rolling the die 15 times.*)

   (b) Designate

   $$a_{ij} = \begin{cases} 1 & \text{if } B \text{ occured.} \\ 0 & \text{if } B \text{ did not occur} \end{cases}$$

   All three persons in respective sheets fill in the matrix entries accordingly:

$$\begin{bmatrix}
0 & \square & \square & \square & \square & \square & \square & \square & \square & \square \\
\square & 0 & \square & \square & \square & \square & \square & \square & \square & \square \\
\square & \square & 0 & \square & \square & \square & \square & \square & \square & \square \\
\square & \square & \square & 0 & \square & \square & \square & \square & \square & \square \\
\square & \square & \square & \square & 0 & \square & \square & \square & \square & \square \\
\square & \square & \square & \square & \square & 0 & \square & \square & \square & \square \\
\square & \square & \square & \square & \square & \square & 0 & \square & \square & \square \\
\square & \square & \square & \square & \square & \square & \square & 0 & \square & \square \\
\square & \square & \square & \square & \square & \square & \square & \square & 0 & \square \\
\square & \square & \square & \square & \square & \square & \square & \square & \square & 0
\end{bmatrix}$$

5. Draw the random graph , denote by $G(10, \frac{x}{6})$, corresponding to the above adjacency matrix (i.e draw an edge between i and j if $a_{ij} = 1$).