1. From the graph $G\left(10, \frac{x}{6}\right)$ or from $A$ that you constructed in the worksheet:
(a) fill in the following table from the data in worksheet:

| x | \# Edges |
| :--- | :--- |
|  |  |

(b) Let $E$ denote the number of edges in a realisation of $G\left(10, \frac{x}{6}\right)$. Find the likelihood $L(x ; E)$ that $E$ edges occur in the random Graph $G\left(10, \frac{x}{6}\right)$.
(c) Find $x^{*}$ that maximizes $L(x ; E)$ with respect to $x$. You may assume $x \in[1,5]$.
(d) Substitute your value of $E$ from Question 1, into the expression for $x^{*}$. Is the resulting $x^{*}$ close to your chosen $x$ ?
2. Example 9.2.1.
3. Example 9.2.2.
4. Example 9.3.2.
5. Example 9.3.3.
6. Example 9.4.2.

