**Der Turm von Hanoi – Lösungen**

**1.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Anzahl n der Plättchen | 1 | 2 | 3 | 4 | … |
| Anzahl un der benötigten Umlegungen | 1 | 3 | 7 | 15 | … |

**2.**

rekursiv: un+1 = un + 1 + un = 2∙un + 1

explizit: un = 2n – 1

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| n | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | … |
| un | 1 | 3 | 7 | 15 | 31 | 63 | 127 | 255 | 511 | 1023 | … |