** Root facts: addition**

Bridging/ compensation

Adding to 0

Doubles

Bonds to 10

Adding 1

Adding 2

Adding 10

Near doubles

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **+** | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **0** | 0 + 0 | 0 + 1 | 0 + 2 | 0 + 3 | 0 + 4 | 0 + 5 | 0 + 6 | 0 + 7 | 0 + 8 | 0 + 9 | 0 + 10 |
| **1** | 1 + 0 | 1 + 1 | 1 + 2 | 1 + 3 | 1 + 4 | 1 + 5 | 1 + 6 | 1 + 7 | 1 + 8 | 1 + 9 | 1+ 10 |
| **2** | 2 + 0 | 2 + 1 | 2 + 2 | 2 + 3  | 2 + 4 | 2 + 5 | 2 + 6 | 2 + 7  | 2 + 8 | 2 + 9  | 2 + 10 |
| **3** | 3 + 0 | 3 + 1 | 3 + 2 | 3 + 3 | 3 + 4 | 3 + 5 | 3 + 6 | 3 + 7 | 3 + 8  | 3 + 9 | 3 + 10 |
| **4** | 4 + 0 | 4 + 1 | 4 + 2 | 4 + 3  | 4 + 4 | 4 + 5 | 4 + 6 | 4 + 7 | 4 + 8 | 4 + 9 | 4 + 10 |
| **5** | 5 + 0 | 5 + 1 | 5 + 2 | 5 + 3 | 5 + 4 | 5 + 5 | 5 + 6 | 5 + 7 | 5 + 8 | 5 + 9 | 5 + 10 |
| **6** | 6 + 0 | 6 + 1 | 6 + 2 | 6 + 3 | 6 + 4 | 6 + 5 | 6 + 6 | 6 + 7 | 6 + 8 | 6 + 9  | 6 + 10 |
| **7** | 7 + 0 | 7 + 1 | 7 + 2 | 7 + 3 | 7 + 4 | 7 + 5 | 7 + 6 | 7 + 7 | 7 + 8 | 7 + 9 | 7 +10 |
| **8** | 8 + 0 | 8 + 1 | 8 + 2 | 8 + 3 | 8 + 4 | 8 + 5 | 8 + 6 | 8 + 7 | 8 + 8 | 8 + 9 | 8 + 10 |
| **9** | 9 + 0  | 9 + 1 | 9 + 2 | 9 + 3  | 9 + 4 | 9 + 5 | 9 + 6 | 9 + 7 | 9 + 8 | 9 + 9 | 9 + 10 |
| **10** | 10 + 0 | 10 + 1 | 10 + 2 | 10 + 3  | 10 + 4 | 10 + 5 | 10 + 6 | 10 + 7 | 10 + 8 | 10 + 9  | 10 + 10 |

**Group A: within ten, plus adding 10**

* Adding 1 (e.g. 7 + 1 *and* 1 + 7)
* Doubles of numbers to 5 (e.g. 4 + 4)
* Adding 2 (e.g. 4 + 2 *and* 2 + 4)
* Number bonds to 10 (e.g. 8 + 2 *and* 2 + 8)
* Adding 10 to a number (e.g. 5 + 10 *and* 10 + 5)
* Adding 0 to a number (e.g. 3 + 0 *and* 0 + 3)
* The ones without a family: 5 + 3, 3 + 5, 6 + 3, 3 + 6

**Group B: bridging ten**

* Double 6, 7, 8, and 9
* Other facts (initially) derived using one:
	+ - Near doubles: 8 + 9 = 8 + 8 + 1
		- Bridging: 8 + 9 = 8 + 2 + 7
		- Compensation 8 + 9 = 8 + 10 – 1