**Wurzelgleichungen I**

Löse zuerst folgende Wurzelgleichungen. Finde den Begriff, indem du die Buchstaben den Lösungen zuordnest und danach die Reihenfolge der Buchstaben zusammenpuzzelst.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **-10** | **-9** | **-8** | **-7** | **-6** | **-5** | **-4** | **-3** | **-2** | **-1** |
| **F** | **D** | **A** | **K** | **M** | **E** | **S** | **N** | **C** | **L** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **B** | **I** | **U** | **-** | **E** | **T** | **H** | **G** | **R** | **B** |

= |² 3,82x + 1,4 0

1,4 + 3,82x = - 17,7 |-1,4 x

**3,82x = -19,1 |:3,82** **D = R\{x|x }**

**x = -5**  **L = {-5} E**

= |² 9,8 – 4,9x 0

**9,8 + 4,9 x = 4,9 |-9,8 x 2**

**4,9x = -4,9 |:4,9 D = R\{x|x 2 }**

**x = -1 L = {-1} L**

= |² 8,9x – 7,5 0

**8,9x – 7,5 = 10,3 |+7,5 x**

**8,9x = 17,8 |:8,9 D = R\{x|x }**

**x = 2 L = {2} I**

= |² 8,9 – 0,31x 0

**8,9 – 0,31 x = 10,14 |-8,9 x**

**-0,31x = 1,24 |:(-0,31) D = R\{x|x }**

**x = -4 L = {-4} S**

= |² 4 – 2x 0

**4 – 2 x = 20 |-4 x 2**

**-2x = 16 |:(-0,31) D = R\{x|x 2}**

**x = -8 L = {-8} A**

= |² 4 – 0,73x 0

**4 – 0,73x = 3,27 |-4 x**

**– 0,73x = -0,73 |:(-0,73) D = R\{x|x }**

**x = 1 L = {1} B**

= |² **9,51x – 1**  0

**9,51x + 1 = 48,55 |-1 x**

**9,51x = 47,55 |:9,51 D = R\{x|x }**

**x = 5 L = {5} E**

= |² -0,3 + 9,53x 0

-0,3 + 9,53x = 57,48 | -0,3 **x**

**9,53x = 57,18 |:9,53 D = R\{x|x**  }

**x = 6 L = {6} T**

= |² 10 + 9x 0

10 - 9x = 53 |+10 x

9x = 63 |:9 **D = R\{x|x**  }

x = 7 **L = {7} H**

**Rechenweg wie vorher**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E** | **L** | **I** | **S** | **A** | **B** | **E** | **T** | **H** |