Square Numbers and Square Roots

Squaring a number means multiplying a number by itself. For example $5^2 = 5 \times 5 = 25$.
The square root of a number is another number which squares to make the number. For example, the square root of 25 is 5, because 5 squares to make 25.

If you forget, just remember you can calculate square numbers by multiplying the number by itself.
$15^2 = 15 \times 15$

$$\begin{array}{r} 15 \\ \times 15 \\ \hline 75 \\ +150 \\ \hline 225 \end{array}$$

Number	Squared
1	1
2	4
3	9
4	16
5	25
6	36
7	49
8	64
9	81
10	100
11	121
12	144
13	169
14	196
15	225

Number	Square Root
1	1
4	2
9	3
16	4
25	5
36	6
49	7
64	8
81	9
100	10
121	11
144	12
169	13
196	14
225	15

This is the symbol for a square root:
$\sqrt{25} = 5$

Cube Numbers and Cube Roots

Cubing a number means multiplying a number by itself three times.
For example $5^3 = 5 \times 5 \times 5 = 125$.
The cube root of a number is another number which cubes to make the number. For example, the cube root of 125 is 5, because 5 cubes to make 125.

Number	Cubed
1	1
2	8
3	27
4	64
5	125

Number	Cube Root
1	1
8	2
27	3
64	4
125	5

This is the symbol for a cube root:
$\sqrt[3]{125} = 5$

Extension: Can you calculate the rest of the cube numbers upto 10^3?

Memory test time!

Fill in these tables from memory, without looking. If you forget, calculate the numbers by multiplication.

Number	Squared
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

Number	Square Root
1	
4	
9	
16	
25	
36	
49	
64	
81	
100	
121	
144	
169	
196	
225	

Number	Cubed
1	
2	
3	
4	
5	

Number	Cube Root
1	
8	
27	
64	
125	