

# Constant Square-Root Palindromes

Computation specification:

```
i := 1 to 10
n := 2 * i
m := n / 4
condition 1
filter 1
comment:
```

Okay Cancel

Figure 1. Specification Dialog

```
i := 1 to 10
n := 2 * i
m := n / 4
condition: 1
filter: 1
comment:
```

i	n	m	palindrome
2	4	1	[]
3	6	1	[]
4	8	2	[8]
5	10	2	[10]
6	12	3	[8]
7	14	3	[9,2,1,2,2,5,4,1,1,13,1,1,4,5,2,2,1,2,9]
8	16	4	[8]
9	18	4	[9]
10	20	5	[8]

Okay Solve Write Write All Recalculate

Figure 2. Result Dialog

Computation specification:

```
i := 1 to 100
n := i
m := 1 to 2 * n
condition 1
filter (*pal = 3) & constant(pal)
comment:
```

Okay Cancel

Figure 3. Search Dialog for  $\bar{j}^3$

```
i := 1 to 100
n := i
m := 1 to 2 * n
condition: 1
filter: (*pal = 3) & constant(pal)
comment:
```

i	n	m	palindrome
2	2	3	[1,1,1]
5	5	7	[1,1,1]
7	7	6	[2,2,2]
8	8	11	[1,1,1]
11	11	15	[1,1,1]
13	13	11	[2,2,2]
14	14	19	[1,1,1]
17	17	23	[1,1,1]
18	18	11	[3,3,3]
19	19	16	[2,2,2]
20	20	27	[1,1,1]
23	23	31	[1,1,1]
25	25	21	[2,2,2]
26	26	35	[1,1,1]
29	29	39	[1,1,1]
31	31	26	[2,2,2]
32	32	43	[1,1,1]
35	35	47	[1,1,1]
37	37	31	[2,2,2]
38	38	18	[4,4,4]
39	39	51	[1,1,1]

...

Okay Solve Write Write All Recalculate

Figure 4. Result Dialog for  $\bar{j}^3$

Computation specification:

```
i := 1 to 100
n := i
m := 1 to 2 * n
condition 1
filter (*pal = 3) & (constant(pal) = 2)
comment:
```

Okay Cancel

Figure 5. Specification Dialog for  $\bar{2}^3$

```
i := 1 to 100
n := i
m := 1 to 2 * n
condition: 1
filter: (*pal = 3) & (constant(pal) = 2)
comment:
```

i	n	m	palindrome
7	7	6	[2,2,2]
13	13	11	[2,2,2]
19	19	16	[2,2,2]
25	25	21	[2,2,2]
31	31	26	[2,2,2]
37	37	31	[2,2,2]
43	43	36	[2,2,2]
49	49	41	[2,2,2]
55	55	46	[2,2,2]
61	61	51	[2,2,2]
67	67	56	[2,2,2]
73	73	61	[2,2,2]
79	79	66	[2,2,2]
85	85	71	[2,2,2]
91	91	76	[2,2,2]
97	97	81	[2,2,2]

Okay Solve Write Write All Recalculate

Figure 6. Results for  $\bar{2}^3$

$n = 6*i+1$ $m = (5*m+1)/6$ $m = (5*i+1)$ <p>palindrome: [2,2,2]</p>
<input type="button" value="Write"/> <input type="button" value="Verify"/> <input type="button" value="Okay"/>

Figure 7. Solution for  $\overline{2}^3$

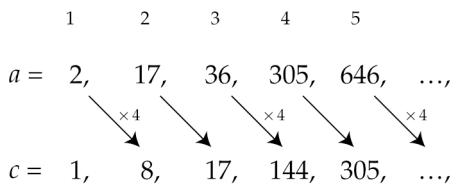


Figure 8. Relationship between  $a$  and  $c$