

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 \overline{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]
38	38	51	[1,1,1]
...			

Okay

Solve

Write

Write All

Recalculate

Figure 4. Result Dialog for \overline{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 $\overline{2}^3$

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 $\overline{2}^3$

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n = 5*i+1
m = (5*n+1)/5
m = (5*i+1)
palindrome: [2,2,2]

```

Write

Verify

Okay

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

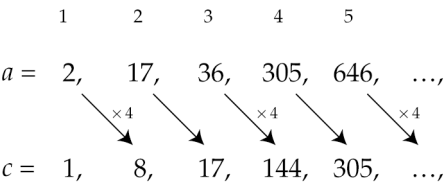


Figure 8. Relationship between a and c