

$$L=0$$

$$M=49$$

$$N=4$$

$$4 \times 2^5 = 4 \times 32$$

$$= 128$$

$$M = \frac{68}{4}$$

$$49 - \frac{68}{4}$$

$$= 49 - 17$$

$$= 32$$

L

0

4

4

4

4

68

M

49

24

12

6

3

1

N

4

8

16

32

64

128

L

0

3

3

15

15

15

L

0

5

5

25

25

25

25

M

37

18

9

4

2

1

M

69

34

17

8

4

2

1

N

3

6

12

24

48

96

N

5

10

20

40

80

160

320

$$5 \times 2^6 = 5 \times 64$$

$$= 320$$

$$3 - \frac{25}{5} = 64$$

L	M	N
0	49	3
3	24	6
3	12	12
3	6	24
3	3	48
51	1	96

L	M	N
0	37	4
4	18	8
4	9	16
20	8	32
20	4	64
20	2	128
20	1	256

- * Running time of algorithm is $\log m$
- * If we subtract from the initial M , the ~~division~~ result of division of Final (L) / initial (N)

$$\text{Initial (M)} - \frac{\text{Final (L)}}{\text{Initial (N)}}$$

We get the number which can be subtracted from initial M to obtain the highest power of 2 contained with initial M