

# Mathemagical Numbers 1 to 99

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Every natural number from 1 to 99 has interesting properties,  
so we call them *mathemagical numbers*.

While browsing these mathemagical numbers,  
if you are boggled by a word,  
browse the [Glossary](#) down yonder below the numbers.

In this unit you will find  
odd numbers and even numbers  
prime numbers, emirps, and palprimes  
composite numbers  
prime factorization of composite numbers  
factors and proper factors  
sums of factors and proper factors  
deficient numbers, perfect numbers, and abundant numbers  
square numbers and cubic numbers  
triangular numbers and factorial numbers  
Fibonacci numbers  
palindromic numbers  
number of protons in an atom

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## Mathematical Numbers 1 to 99 | [TOC](#)

### 1 (one)

1 is a natural number.  
 1 is the predecessor of 2.  
 1 does not have a predecessor.  
 1 is the least natural number.  
 1 is an odd number.  
 1 is the least odd number.  
 1 is not a prime number.  
 1 is not a composite number.  
 1 is the only natural number that has exactly 1 factor.  
 One and only factor of 1: 1  
 1 has no proper factor.  
 1 is a factor of every natural number.  
 1 is the multiplicative identity.  $1 \times n = n$  and  $n \times 1 = n$ .  
 1 is a square number.  $1 = 1 \times 1 = 1^2$   
 1 is a cubic number.  $1 = 1 \times 1 \times 1 = 1^3$   
 1 is a power of 2.  $1 = 2^0$   
 1 is a triangular number.  
 1 is a factorial number.  $1! = 1$   
 1 is a Fibonacci number.  
 Geometry: a ray has 1 endpoint.  
 A hydrogen (H) atom has 1 proton.

Here are some "onederful" words from an old folk song.

I'll sing you one-o  
 Green grow the rushes-o  
 What is your one-o?  
 One is one and all alone  
 And evermore shall be so.

### 2 (two)

2 is a natural number.  
 2 is the successor of 1.  
 2 is the predecessor of 3.  
 2 is an even number.  
 2 is the least even number.  
 2 is a prime number.  
 2 is the least prime number.  
 2 is the only even prime number.  
 Factors of 2: 1, 2  
 2 is the least number that has exactly 2 different factors.  
 Proper factor of 2: 1

2 is the least number that has exactly 1 proper factor.

Sum of factors of 2 = 3

Sum of proper factors of 2 = 1

2 is a deficient number.

2 is a power of 2.  $2 = 2^1$

2 is a factorial number.  $2! = 1 \times 2 = 2$

2 is a Fibonacci number.

Geometry: a line segment has 2 endpoints.

A helium (He) atom has 2 protons.

### 3 (three)

3 is a natural number.

3 is the successor of 2.

3 is the predecessor of 4.

3 is an odd number.

3 is a prime number.

3 is the least odd prime number.

Factors of 3: 1, 3

Proper factor of 3: 1

Sum of factors of 3 = 4

Sum of proper factors of 3 = 1

3 is a deficient number.

3 is a triangular number.  $3 = 1 + 2$

3 is a Fibonacci number.

Geometry: a triangle has 3 sides and 3 vertices.

A lithium (Li) atom has 3 protons.

### 4 (four)

4 is a natural number.

4 is the successor of 3.

4 is the predecessor of 5.

4 is an even number.

4 is a composite number.

Prime factorization:  $4 = 2 \times 2$

4 is the least composite number.

Factors of 4: 1, 2, 4

4 is the least number that has exactly 3 different factors.

Proper factors of 4: 1, 2

4 is the least natural number that has exactly 2 different proper factors.

Sum of factors of 4 = 7

Sum of proper factors of 4 = 3

4 is a deficient number.

4 is a square number.  $4 = 2 \times 2 = 2^2$

4 is the sum of the first 2 odd numbers.  $4 = 1 + 3$

4 is a power of 2.  $4 = 2^2$

Geometry: a quadrilateral has 4 sides and 4 vertices.

Geometry: a parallelogram has 4 sides and 4 vertices.

Geometry: a rectangle has 4 sides and 4 vertices.

Geometry: a rhombus has 4 sides and 4 vertices.

Geometry: a square has 4 sides and 4 vertices.

Geometry: a tetrahedron has 4 faces and 4 vertices.

A heffalump has 4 legs.

A beryllium (Be) atom has 4 protons.

## 5 (five)

5 is a natural number.

5 is the successor of 4.

5 is the predecessor of 6.

5 is an odd number.

5 is a prime number.

Factors of 5: 1, 5

Proper factor of 5: 1

Sum of factors of 5 = 6

Sum of proper factors of 5 = 1

5 is a deficient number.

5 is a Fibonacci number.

5 is the sum of the first 2 prime numbers.  $5 = 2 + 3$

5 is the sum of the first 2 square numbers.  $5 = 1 + 4$

Geometry: a pentagon has 5 sides and 5 vertices.

Geometry: a pyramid has 5 faces and 5 vertices.

A boron (B) atom has 5 protons.

## 6 (six)

6 is a natural number.

6 is the successor of 5.

6 is the predecessor of 7.

6 is an even number.

6 is a composite number.

Prime factorization:  $6 = 2 \times 3$

Factors of 6: 1, 2, 3, 6

6 is the least number that has exactly 4 different factors.

Proper factors of 6: 1, 2, 3

6 is the least number that has exactly 3 different proper factors.

Sum of factors of 6 = 12

Sum of proper factors of 6 = 6

6 is a perfect number.

6 is the least perfect number.

6 is a factorial number.  $6 = 3! = 1 \times 2 \times 3$

6 is a triangular number.  $6 = 1 + 2 + 3$

Geometry: a hexagon has 6 sides and 6 vertices.

Geometry: a hexahedron has 6 faces.

A carbon (C) atom has 6 protons.

**7 (seven)**

7 is a natural number.

7 is the successor of 6.

7 is the predecessor of 8.

7 is an odd number.

7 is a prime number.

Factors of 7: 1, 7

Proper factor of 7: 1

Sum of factors of 7 = 8

Sum of proper factors of 7 = 1

7 is a deficient number.

Geometry: a heptagon has 7 sides and 7 vertices.

Geometry: a heptahedron has 7 faces.

7 is the number of days in a week.

A nitrogen (N) atom has 7 protons.

**8 (eight)**

8 is a natural number.

8 is the successor of 7.

8 is the predecessor of 9.

8 is an even number.

8 is a composite number.

Prime factorization:  $8 = 2 \times 2 \times 2$

Factors of 8: 1, 2, 4, 8

Proper factors of 8: 1, 2, 4

Sum of factors of 8 = 15

Sum of proper factors of 8 = 7

8 is a deficient number.

8 is a cubic number.  $8 = 2 \times 2 \times 2 = 2^3$

8 is a power of 2.  $8 = 2^3$

8 is a Fibonacci number.

8 is the base of the octal number system.

Geometry: an octagon has 8 sides and 8 vertices.

Geometry: an octahedron has 8 faces.

An oxygen (O) atom has 8 protons.

**9 (nine)**

9 is a natural number.

9 is the successor of 8.

9 is the predecessor of 10.

9 is an odd number.

9 is a composite number.

Prime factorization:  $9 = 3 \times 3$

Factors of 9: 1, 3, 9

Proper factors of 9: 1, 3  
Sum of factors of 9 = 13  
Sum of proper factors of 9 = 4  
9 is a deficient number.  
9 is a square number.  $9 = 3 \times 3 = 3^2$   
9 is the sum of the first 3 odd numbers.  $9 = 1 + 3 + 5$   
9 is the sum of the first 2 cubic numbers.  $9 = 1 + 8$   
Geometry: a nonagon has 9 sides and 9 vertices.  
Geometry: a nonahedron has 9 faces.  
A fluorine (F) atom has 9 protons.

### 10 (ten)

10 is a natural number.  
10 is the successor of 9.  
10 is the predecessor of 11.  
10 is an even number.  
10 is a composite number.  
Prime factorization:  $10 = 2 \times 5$   
Factors of 10: 1, 2, 5, 10.  
Proper factors of 10: 1, 2, 5.  
Sum of factors of 10 = 18  
Sum of proper factors of 10 = 8  
10 is a deficient number.  
10 is a triangular number.  $10 = 1 + 2 + 3 + 4$   
10 is the sum of the first 3 prime numbers.  $10 = 2 + 3 + 5$   
10 is the base of the decimal number system.  
Geometry: a decagon has 10 sides and 10 vertices.  
Geometry: a decahedron has 10 faces.  
A neon (Ne) atom has 10 protons.

### 11 (eleven)

11 is a natural number.  
11 is the successor of 10.  
11 is the predecessor of 12.  
11 is an odd number.  
11 is a prime number.  
11 is a palprime.  
Factors of 11: 1, 11  
Proper factor of 11: 1  
Sum of factors of 11 = 12  
Sum of proper factors of 11 = 1  
11 is a deficient number.  
11 is a palindromic number.  
A sodium (Na) atom has 11 protons.

### 12 (twelve)

12 is a natural number.  
12 is the successor of 11.  
12 is the predecessor of 13.  
12 is an even number.  
12 is a composite number.  
Prime factorization:  $12 = 2 \times 2 \times 3$   
Factors of 12: 1, 2, 3, 4, 6, 12  
12 is the least number that has exactly 6 different factors.  
Proper factors of 12: 1, 2, 3, 4, 6.  
12 is the least number that has exactly 5 different proper factors.  
Sum of factors of 12 = 28  
Sum of proper factors of 12 = 16  
12 is an abundant number.  
12 is the least number that is an abundant number.  
Geometry: a dodecagon has 12 sides and 12 vertices.  
Geometry: a dodecahedron has 12 faces.  
12 is the number of objects in a dozen objects.  
A magnesium (Mg) atom has 12 protons.

### **13 (thirteen)**

13 is a natural number.  
13 is the successor of 12.  
13 is the predecessor of 14.  
13 is an odd number.  
13 is a prime number.  
13 is an emirp. (31 is a prime number.)  
Factors of 13: 1, 13  
Proper factor of 13: 1  
Sum of factors of 13 = 14  
Sum of proper factors of 13 = 1  
13 is a deficient number.  
13 is a Fibonacci number.  
Triskaidekaphobia is the fear of 13.  
Triskaidekaphilia is the love of 13.  
An aluminum (Al) atom has 13 protons.

### **14 (fourteen)**

14 is a natural number.  
14 is the successor of 13.  
14 is the predecessor of 15.  
14 is an even number.  
14 is a composite number.  
Prime factorization:  $14 = 2 \times 7$   
Factors of 14: 1, 2, 7, 14  
Proper factors of 14: 1, 2, 7  
Sum of factors of 14 = 24



Sum of proper factors of 14 = 10

14 is a deficient number.

14 is the sum of the first 3 square numbers.  $14 = 1 + 4 + 9$

A silicon (Si) atom has 14 protons.

### **15 (fifteen)**

15 is a natural number.

15 is the successor of 14.

15 is the predecessor of 16.

15 is an odd number.

15 is a composite number.

Prime factorization:  $15 = 3 \times 5$

Factors of 15: 1, 3, 5, 15

Proper factors of 15: 1, 3, 5

Sum of factors of 15 = 24

Sum of proper factors of 15 = 9

15 is a deficient number.

15 is a triangular number.  $15 = 1 + 2 + 3 + 4 + 5$

A phosphorus (P) atom has 15 protons.

### **16 (sixteen)**

16 is a natural number.

16 is the successor of 15.

16 is the predecessor of 17.

16 is an even number.

16 is a composite number.

Prime factorization:  $16 = 2 \times 2 \times 2 \times 2$

Factors of 16: 1, 2, 4, 8, 16.

16 is the least natural number that has exactly 5 different factors.

Proper factors of 16: 1, 2, 4, 8.

16 is the least natural number that has exactly 4 different proper factors.

Sum of factors of 16 = 31

Sum of proper factors of 16 = 15

16 is a deficient number.

16 is a square number.  $16 = 4 \times 4 = 4^2$

16 is the sum of the first 4 odd numbers.  $16 = 1 + 3 + 5 + 7$

16 is a power of 2.  $16 = 2^4$

A sulfur (S) atom has 16 protons.

### **17 (seventeen)**

17 is a natural number.

17 is the successor of 16.

17 is the predecessor of 18.

17 is an odd number.

17 is a prime number.

17 is an emirp. (71 is a prime number.)

Factors of 17: 1, 17

Proper factor of 17: 1

Sum of factors of 17 = 18

Sum of proper factors of 17 = 1

17 is a deficient number.

17 is the sum of the first 4 prime numbers.  $17 = 2 + 3 + 5 + 7$

A chlorine (Cl) atom has 17 protons.

### **18 (eighteen)**

18 is a natural number.

18 is the successor of 17.

18 is the predecessor of 19.

18 is an even number.

18 is a composite number.

Prime factorization:  $18 = 2 \times 3 \times 3$

Factors of 18: 1, 2, 3, 6, 9, 18

Proper factors of 18: 1, 2, 3, 6, 9

Sum of factors of 18 = 39

Sum of proper factors of 18 = 21

18 is an abundant number.

An argon (Ar) atom has 18 protons.

### **19 (nineteen)**

19 is a natural number.

19 is the successor of 18.

19 is the predecessor of 20.

19 is an odd number.

19 is a prime number.

Factors of 19: 1, 19

Proper factor of 19: 1

Sum of factors of 19 = 20

Sum of proper factors of 19 = 1

19 is a deficient number.

A potassium (K) atom has 19 protons.

### **20 (twenty)**

20 is a natural number.

20 is the successor of 19.

20 is the predecessor of 21.

20 is an even number.

20 is a composite number.

Prime factorization:  $20 = 2 \times 2 \times 5$

Factors of 20: 1, 2, 4, 5, 10, 20

Proper factors of 20: 1, 2, 4, 5, 10

Sum of factors of 20 = 42

Sum of proper factors of 20 = 22

20 is an abundant number.

Geometry: an icosagon has 20 sides and 20 vertices.

Geometry: an icosahedron has 20 faces.

A calcium (Ca) atom has 20 protons.

### **21 (twenty-one)**

21 is a natural number.

21 is the successor of 20.

21 is the predecessor of 22.

21 is an odd number.

21 is a composite number.

Prime factorization:  $21 = 3 \times 7$

Factors of 21: 1, 3, 7, 21

Proper factors of 21: 1, 3, 7

Sum of factors of 21 = 32

Sum of proper factors of 21 = 11

21 is a deficient number.

21 is a triangular number.  $21 = 1 + 2 + 3 + 4 + 5 + 6$

21 is a Fibonacci number.

A scandium (Sc) atom has 21 protons.

### **22 (twenty-two)**

22 is a natural number.

22 is the successor of 21.

22 is the predecessor of 23.

22 is an even number.

22 is a composite number.

Prime factorization:  $22 = 2 \times 11$

Factors of 22: 1, 2, 11, 22

Proper factors of 22: 1, 2, 11

Sum of factors of 22 = 36

Sum of proper factors of 22 = 14

22 is a deficient number.

22 is a palindromic number.

A titanium (Ti) atom has 22 protons.

### **23 (twenty-three)**

23 is a natural number.

23 is the successor of 22.

23 is the predecessor of 24.

23 is an odd number.

23 is a prime number.

Factors of 23: 1, 23

Proper factor of 23: 1

Sum of factors of 23 = 24

Sum of proper factors of 23 = 1

23 is a deficient number.

A vanadium (V) atom has 23 protons.

## **24 (twenty-four)**

24 is a natural number.

24 is the successor of 23.

24 is the predecessor of 25.

24 is an even number.

24 is a composite number.

Prime factorization:  $24 = 2 \times 2 \times 2 \times 3$

Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24

24 is the least number that has 8 different factors.

Proper factors of 24: 1, 2, 3, 4, 6, 8, 12.

24 is the least number that has 7 different proper factors.

Sum of factors of 24 = 60

Sum of proper factors of 24 = 36

24 is an abundant number.

24 is a factorial number.  $4! = 1 \times 2 \times 3 \times 4 = 24$

A chromium (Cr) atom has 24 protons.

## **25 (twenty-five)**

25 is a natural number.

25 is the successor of 24.

25 is the predecessor of 26.

25 is an odd number.

25 is composite number.

Prime factorization:  $25 = 5 \times 5$

Factors of 25: 1, 5, 25

Proper factors of 25: 1, 5

Sum of factors of 25 = 31

Sum of proper factors of 25 = 6

25 is a deficient number.

25 is a square number.  $25 = 5 \times 5 = 5^2$

25 is the sum of the first 5 odd numbers.  $25 = 1 + 3 + 5 + 7 + 9$

25 is the number of prime numbers less than 100.

A manganese (Mn) atom has 25 protons.

## **26 (twenty-six)**

26 is a natural number.

26 is the successor of 25.

26 is the predecessor of 27.

26 is an even number.

26 is a composite number.

Prime factorization:  $26 = 2 \times 13$

Factors of 26: 1, 2, 13, 26

Proper factors of 26: 1, 2, 13

Sum of factors of 26 = 42

Sum of proper factors of 26 = 16

26 is a deficient number.

An iron (Fe) atom has 26 protons.

### **27 (twenty-seven)**

27 is a natural number.

27 is the successor of 26.

27 is the predecessor of 28.

27 is an odd number.

27 is a composite number.

Prime factorization:  $27 = 3 \times 3 \times 3$

Factors of 27: 1, 3, 9, 27.

Proper factors of 27: 1, 3, 9

Sum of factors of 27 = 40

Sum of proper factors of 27 = 13

27 is a deficient number.

27 is a cubic number.  $27 = 3 \times 3 \times 3 = 3^3$

A cobalt (Co) atom has 27 protons.

### **28 (twenty-eight)**

28 is a natural number.

28 is the successor of 27.

28 is the predecessor of 29.

28 is an even number.

28 is a composite number.

Prime factorization:  $28 = 2 \times 2 \times 7$

Factors of 28: 1, 2, 4, 7, 14, 28

Proper factors of 28: 1, 2, 4, 7, 14

Sum of factors of 28 = 56

Sum of proper factors of 28 = 28

28 is a perfect number.

28 is a triangular number.  $28 = 1 + 2 + 3 + 4 + 5 + 6 + 7$

28 is the sum of the first 5 prime numbers.  $28 = 2 + 3 + 5 + 7 + 11$

A nickel (Ni) atom has 28 protons.

### **29 (twenty-nine)**

29 is a natural number.

29 is the successor of 28.

29 is the predecessor of 30.

29 is an odd number.

29 is a prime number.

Factors of 29: 1, 29

Proper factor of 29: 1

Sum of factors of 29 = 30

Sum of proper factors of 29 = 1

29 is a deficient number.

A copper (Cu) atom has 29 protons.

### **30 (thirty)**

30 is a natural number.

30 is the successor of 29.

30 is the predecessor of 31.

30 is an even number.

30 is a composite number.

Prime factorization:  $30 = 2 \times 3 \times 5$

Factors of 30: 1, 2, 3, 5, 6, 10, 15, 30

Proper factors of 30: 1, 2, 3, 5, 6, 10, 15

Sum of factors of 30 = 72

Sum of proper factors of 30 = 42

30 is an abundant number.

30 is the sum of the first 4 square numbers.  $30 = 1 + 4 + 9 + 16$

A zinc (Zn) atom has 30 protons.

### **31 (thirty-one)**

31 is a natural number.

31 is the successor of 30.

31 is the predecessor of 32.

31 is an odd number.

31 is a prime number.

31 is an emirp. (13 is a prime number.)

Factors of 31: 1, 31

Proper factor of 31: 1

Sum of factors of 31 = 32

Sum of proper factors of 31 = 1

31 is a deficient number.

A gallium (Ga) atom has 31 protons.

### **32 (thirty-two)**

32 is a natural number.

32 is the successor of 31.

32 is the predecessor of 33.

32 is an even number.

32 is a composite number.

Prime factorization:  $32 = 2 \times 2 \times 2 \times 2 \times 2$

Factors of 32: 1, 2, 4, 8, 16, 32

Proper factors of 32: 1, 2, 4, 8, 16

Sum of factors of 32 = 63

Sum of proper factors of 32 = 31

32 is a deficient number.

32 is a power of 2.  $32 = 2^5$

A germanium (Ge) atom has 32 protons.

### **33 (thirty three)**

33 is a natural number.

33 is the successor of 32.

33 is the predecessor of 34.

33 is an odd number.

33 is a composite number.

Prime factorization:  $33 = 3 \times 11$

Factors of 33: 1, 3, 11, 33

Proper factors of 33: 1, 3, 11

Sum of factors of 33 = 48

Sum of proper factors of 33 = 15

33 is a deficient number.

33 is a palindromic number.

An arsenic (As) atom has 33 protons.

### **34 (thirty four)**

34 is a natural number.

34 is the successor of 33.

34 is the predecessor of 35.

34 is an even number.

34 is a composite number.

Prime factorization:  $34 = 2 \times 17$

Factors of 34: 1, 2, 17, 34

Proper factors of 34: 1, 2, 17

Sum of factors of 34 = 54

Sum of proper factors of 34 = 20

34 is a deficient number.

34 is a Fibonacci number.

A selenium (Se) atom has 34 protons.

### **35 (thirty five)**

35 is a natural number.

35 is the successor of 34.

35 is the predecessor of 36.

35 is an odd number.

35 is a composite number.

Prime factorization:  $35 = 5 \times 7$

Factors of 35: 1, 5, 7, 35

Proper factors of 35: 1, 5, 7

Sum of factors of 35 = 48

Sum of proper factors of 35 = 13

35 is a deficient number.

A Bromine (Br) atom has 35 protons.

### **36 (thirty six)**

36 is a natural number.

36 is the successor of 35.

36 is the predecessor of 37.

36 is an even number.

36 is a composite number.

Prime factorization:  $36 = 2 \times 2 \times 3 \times 3$

Factors of 36: 1, 2, 3, 4, 6, 9, 12, 18, 36

36 is the least number with exactly 9 factors.

Proper factors of 36: 1, 2, 3, 4, 6, 9, 12, 18

36 is the least number with exactly 8 proper factors.

Sum of factors of 36 = 91

Sum of proper factors of 36 = 55

36 is an abundant number.

36 is a square number.  $36 = 6 \times 6 = 6^2$

36 is the sum of the first 6 odd numbers.  $36 = 1 + 3 + 5 + 7 + 9 + 11$

36 is a triangular number.  $36 = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8$

36 is the sum of the first 3 cubic numbers.  $36 = 1 + 8 + 27$

A krypton (Kr) atom has 36 protons.

### **37 (thirty seven)**

37 is a natural number.

37 is the successor of 36.

37 is the predecessor of 38.

37 is an odd number.

37 is a prime number.

37 is an emirp. (73 is a prime number.)

Factors of 37: 1, 37

Proper factor of 37: 1

Sum of factors of 37 = 38

Sum of proper factors of 37 = 1

37 is a deficient number.

37 degrees Celsius is typical human body temperature.

A rubidium (Rb) atom has 37 protons.

### **38 (thirty eight)**

38 is a natural number.

38 is the successor of 37.

38 is the predecessor of 39.



38 is an even number.

38 is a composite number.

Prime factorization:  $38 = 2 \times 19$

Factors of 38: 1, 2, 19, 38

Proper factors of 38: 1, 2, 19

Sum of factors of 38 = 60

Sum of proper factors of 38 = 22

38 is a deficient number.

A strontium (Sr) atom has 38 protons.

### **39 (thirty nine)**

39 is a natural number.

39 is the successor of 38.

39 is the predecessor of 40.

39 is an odd number.

39 is a composite number.

Prime factorization:  $39 = 3 \times 13$

Factors of 39: 1, 3, 13, 39

Proper factors of 39: 1, 3, 13

Sum of factors of 39 = 56

Sum of proper factors of 39 = 17

39 is a deficient number.

A yttrium (Y) atom has 39 protons.

### **40 (forty)**

40 is a natural number.

40 is the successor of 39.

40 is the predecessor of 41.

40 is an even number.

40 is a composite number.

Prime factorization:  $40 = 2 \times 2 \times 2 \times 5$

Factors of 40: 1, 2, 4, 5, 8, 10, 20, 40

Proper factors of 40: 1, 2, 4, 5, 8, 10, 20

Sum of factors of 40: 90

Sum of proper factors of 40: 50

40 is an abundant number.

A zirconium (Zr) atom has 40 protons.

### **41 (forty one)**

41 is a natural number.

41 is the successor of 40.

41 is the predecessor of 42.

41 is an odd number.

41 is a prime number.

Factors of 41: 1, 41

Proper factor of 41: 1

Sum of factors of 41 = 42

Sum of proper factors of 41 = 1

41 is a deficient number.

41 is the sum of the first 6 prime numbers.  $28 = 2 + 3 + 5 + 7 + 11 + 13$

A niobium (Nb) atom has 41 protons.

## **42 (forty two)**

42 is a natural number.

42 is the successor of 41.

42 is the predecessor of 43.

42 is an even number.

42 is a composite number.

Prime factorization:  $42 = 2 \times 3 \times 7$

Factors of 42: 1, 2, 3, 6, 7, 14, 21, 42

Proper factors of 42: 1, 2, 3, 6, 7, 14, 21

Sum of factors of 42 = 96

Sum of proper factors of 42 = 54

42 is an abundant number.

A molybdenum (Mo) atom has 42 protons.

## **43 (forty three)**

43 is a natural number.

43 is the successor of 42.

43 is the predecessor of 44.

43 is an odd number.

43 is a prime number.

Factors of 43: 1, 43

Proper factor of 43: 1

Sum of factors of 43 = 44

Sum of proper factors of 43 = 1

43 is a deficient number.

A technicium (Tc) atom has 43 protons.

## **44 (forty four)**

44 is a natural number.

44 is the successor of 43.

44 is the predecessor of 45.

44 is an even number.

44 is a composite number.

Prime factorization:  $44 = 2 \times 2 \times 11$

Factors of 44: 1, 2, 4, 11, 22, 44

Proper factors of 44: 1, 2, 4, 11, 22

Sum of factors of 44: 84

Sum of proper factors of 44: 40

44 is a deficient number.  
44 is a palindromic number.  
A ruthenium (Ru) atom has 44 protons.

### **45 (forty five)**

45 is a natural number.  
45 is the successor of 44.  
45 is the predecessor of 46.  
45 is an odd number.  
45 is a composite number.  
Prime factorization:  $45 = 3 \times 3 \times 5$   
Factors of 45: 1, 3, 5, 9, 15, 45  
Proper factors of 45: 1, 3, 5, 9, 15  
Sum of factors of 45 = 78  
Sum of proper factors of 45 = 33  
45 is a deficient number.  
45 is a triangular number.  $45 = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9$   
A rhodium (Rh) atom has 45 protons.

### **46 (forty six)**

46 is a natural number.  
46 is the successor of 45.  
46 is the predecessor of 47.  
46 is an even number.  
46 is a composite number.  
Prime factorization:  $46 = 2 \times 23$   
Factors of 46: 1, 2, 23, 46  
Proper factors of 46: 1, 2, 23  
Sum of factors of 46 = 72  
Sum of proper factors of 46 = 26  
46 is a deficient number.  
A palladium (Pd) atom has 46 protons.

### **47 (forty seven)**

47 is a natural number.  
47 is the successor of 46.  
47 is the predecessor of 48.  
47 is an odd number.  
47 is a prime number.  
Factors of 47: 1, 47  
Proper factor of 47: 1  
Sum of factors of 47 = 48  
Sum of proper factors of 47 = 1  
47 is a deficient number.  
A silver (Ag) atom has 47 protons.

**48 (forty eight)**

48 is a natural number.  
48 is the successor of 47.  
48 is the predecessor of 49.  
48 is an even number.  
48 is a composite number.  
Prime factorization:  $48 = 2 \times 2 \times 2 \times 2 \times 3$   
Factors of 48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48  
48 is the least number that has exactly 10 factors.  
Proper factors of 48: 1, 2, 3, 4, 6, 8, 12, 16, 24  
48 is the least number that has exactly 9 proper factors.  
Sum of factors of 48 = 124  
Sum of proper factors of 48 = 76  
48 is an abundant number.  
A cadmium (Cd) atom has 48 protons.

**49 (forty nine)**

49 is a natural number.  
49 is the successor of 48.  
49 is the predecessor of 50.  
49 is an odd number.  
49 is a composite number.  
Prime factorization:  $49 = 7 \times 7$   
Factors of 49: 1, 7, 49  
Proper factors of 49: 1, 7  
Sum of factors of 49 = 57  
Sum of proper factors of 49 = 8  
49 is a deficient number.  
49 is a square number:  $49 = 7 \times 7 = 7^2$   
49 is the sum of the first 7 odd numbers.  $49 = 1 + 3 + 5 + 7 + 9 + 11 + 13$   
An indium (In) atom has 49 protons.

**50 (fifty)**

50 is a natural number.  
50 is the successor of 49.  
50 is the predecessor of 51.  
50 is an even number.  
50 is a composite number.  
Prime factorization:  $50 = 2 \times 5 \times 5$   
Factors of 50: 1, 2, 5, 10, 25, 50  
Proper factors of 50: 1, 2, 5, 10, 25  
Sum of factors of 50 = 93  
Sum of proper factors of 50 = 43  
50 is a deficient number.

A tin (Sn) atom has 50 protons.

### **51 (fifty one)**

51 is a natural number.

51 is the successor of 50.

51 is the predecessor of 52.

51 is an odd number.

51 is a composite number.

Prime factorization:  $51 = 3 \times 17$

Factors of 51: 1, 3, 17, 51

Proper factors of 51: 1, 3, 17

Sum of factors of 51 = 72

Sum of proper factors of 51 = 21

51 is a deficient number.

An antimony (Sb) atom has 51 protons.

### **52 (fifty two)**

52 is a natural number.

52 is the successor of 51.

52 is the predecessor of 53.

52 is an even number.

52 is a composite number.

Prime factorization:  $52 = 2 \times 2 \times 13$

Factors of 52: 1, 2, 4, 13, 26, 52

Proper factors of 52: 1, 2, 4, 13, 26

Sum of factors of 52 = 98

Sum of proper factors of 52 = 46

52 is a deficient number.

52 is the number of months in a year.

A tellurium (Te) atom has 52 protons.

### **53 (fifty three)**

53 is a natural number.

53 is the successor of 52.

53 is the predecessor of 54.

53 is an odd number.

53 is a prime number.

Factors of 53: 1, 53

Proper factor of 53: 1

Sum of factors of 53 = 54

Sum of proper factors of 53 = 1

53 is a deficient number.

An iodine (I) atom has 53 protons.

### **54 (fifty four)**

54 is a natural number.  
54 is the successor of 53.  
54 is the predecessor of 55.  
54 is an even number.  
54 is a composite number.  
Prime factorization:  $54 = 2 \times 3 \times 3 \times 3$   
Factors of 54: 1, 2, 3, 6, 9, 18, 27, 54  
Proper factors of 54: 1, 2, 3, 6, 9, 18, 27  
Sum of factors of 54 = 120  
Sum of proper factors of 54 = 66  
54 is an abundant number.  
A xenon (Xe) atom has 54 protons.

### **55 (fifty five)**

55 is a natural number.  
55 is the successor of 54.  
55 is the predecessor of 56.  
55 is an odd number.  
55 is a composite number.  
Prime factorization:  $55 = 5 \times 11$   
Factors of 55: 1, 5, 11, 55  
Proper factors of 55: 1, 5, 11  
Sum of factors of 55 = 72  
Sum of proper factors of 55 = 17  
55 is a deficient number.  
55 is a triangular number.  $55 = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10$   
55 is a Fibonacci number.  
55 is the sum of the first 5 square numbers.  $55 = 1 + 4 + 9 + 16 + 25$   
55 is a palindromic number.  
A cesium (Cs) atom has 55 protons.

### **56 (fifty six)**

56 is a natural number.  
56 is the successor of 55.  
56 is the predecessor of 57.  
56 is an even number.  
56 is a composite number.  
Prime factorization:  $56 = 2 \times 2 \times 2 \times 7$   
Factors of 56: 1, 2, 4, 7, 8, 14, 28, 56  
Proper factors of 56: 1, 2, 4, 7, 8, 14, 28  
Sum of factors of 56 = 120  
Sum of proper factors of 56 = 64  
56 is an abundant number.  
A barium (Ba) atom has 56 protons.

### **57 (fifty seven)**

57 is a natural number.  
57 is the successor of 56.  
57 is the predecessor of 58.  
57 is an odd number.  
57 is a composite number.  
Prime factorization:  $57 = 3 \times 19$   
Factors of 57: 1, 3, 19, 57  
Proper factors of 57: 1, 3, 19  
Sum of factors of 57 = 80  
Sum of proper factors of 57 = 23  
57 is a deficient number.  
A lanthanum (La) atom has 57 protons.

### **58 (fifty eight)**

58 is a natural number.  
58 is the successor of 57.  
58 is the predecessor of 59.  
58 is an even number.  
58 is a composite number.  
Prime factorization:  $58 = 2 \times 29$   
Factors of 58: 1, 2, 29, 58  
Proper factors of 58: 1, 2, 29  
Sum of factors of 58 = 90  
Sum of proper factors of 58 = 32  
58 is a deficient number.  
58 is the sum of the first 7 prime numbers.  $58 = 2 + 3 + 5 + 7 + 11 + 13 + 17$   
A cerium (Ce) atom has 58 protons.

### **59 (fifty nine)**

59 is a natural number.  
59 is the successor of 58.  
59 is the predecessor of 60.  
59 is an odd number.  
59 is a prime number.  
Factors of 59: 1, 59  
Proper factor of 59: 1  
Sum of factors of 59 = 60  
Sum of proper factors of 59 = 1  
59 is a deficient number.  
A praseodymium (Pr) atom has 59 protons.

### **60 (sixty)**

60 is a natural number.  
60 is the successor of 59.  
60 is the predecessor of 61.

60 is an even number.

60 is a composite number.

Prime factorization:  $60 = 2 \times 2 \times 3 \times 5$

Factors of 60: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60

60 is the least number that has exactly 12 factors.

Proper factors of 60: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30

60 is the least number that has exactly 11 proper factors.

Sum of factors of 60 = 168

Sum of proper factors of 60 = 108

60 is an abundant number.

60 seconds = 1 minute

60 minutes = 1 hour

60 arc seconds = 1 arc minute

60 arc minutes = 1 degree

60 is the base of the Babylonian number system.

A neodymium (Nd) atom has 60 protons.

### **61 (sixty one)**

61 is a natural number.

61 is the successor of 60.

61 is the predecessor of 62.

61 is an odd number.

61 is a prime number.

Factors of 61: 1, 61

Proper factor of 61: 1

Sum of factors of 61 = 62

Sum of proper factors of 61 = 1

61 is a deficient number.

A promethium (Pm) atom has 61 protons.

### **62 (sixty two)**

62 is a natural number.

62 is the successor of 61.

62 is the predecessor of 63.

62 is an even number.

62 is a composite number.

Prime factorization:  $62 = 2 \times 31$

Factors of 62: 1, 2, 31, 62

Proper factors of 62: 1, 2, 31

Sum of factors of 62 = 96

Sum of proper factors of 62 = 34

62 is a deficient number.

A samarium (Sm) atom has 62 protons.

### **63 (sixty three)**



63 is a natural number.  
63 is the successor of 62.  
63 is the predecessor of 64.  
63 is an odd number.  
63 is a composite number.  
Prime factorization:  $63 = 3 \times 3 \times 7$   
Factors of 63: 1, 3, 7, 9, 21, 63  
Proper factors of 63: 1, 3, 7, 9, 21  
Sum of factors of 63 = 104  
Sum of proper factors of 63 = 41  
63 is a deficient number.  
A europium (Eu) atom has 63 protons.

### **64 (sixty four)**

64 is a natural number.  
64 is the successor of 63.  
64 is the predecessor of 65.  
64 is an even number.  
64 is a composite number.  
Prime factorization:  $64 = 2 \times 2 \times 2 \times 2 \times 2 \times 2$   
Factors of 64: 1, 2, 4, 8, 16, 32, 64  
64 is the least number that has exactly 7 factors.  
Proper factors of 64: 1, 2, 4, 8, 16, 32  
64 is the least number that has exactly 6 proper factors.  
Sum of factors of 64 = 127  
Sum of proper factors of 64 = 63  
64 is a deficient number.  
64 is a square number:  $64 = 8 \times 8 = 8^2$   
64 is the sum of the first 8 odd numbers.  $64 = 1 + 3 + 5 + 7 + 9 + 11 + 13 + 15$   
64 is a cubic number:  $64 = 4 \times 4 \times 4 = 4^3$   
64 is a power of 2.  $64 = 2^6$   
A gadolinium (Gd) atom has 64 protons.

### **65 (sixty five)**

65 is a natural number.  
65 is the successor of 64.  
65 is the predecessor of 66.  
65 is an odd number.  
65 is a composite number.  
Prime factorization:  $65 = 5 \times 13$   
Factors of 65: 1, 5, 13, 65  
Proper factors of 65: 1, 5, 13  
Sum of factors of 65 = 84  
Sum of proper factors of 65 = 19  
65 is a deficient number.  
A terbium (Tb) atom has 65 protons.

**66 (sixty six)**

66 is a natural number.

66 is the successor of 65.

66 is the predecessor of 67.

66 is an even number.

66 is a composite number.

Prime factorization:  $66 = 2 \times 3 \times 11$

Factors of 66: 1, 2, 3, 6, 11, 22, 33, 66

Proper factors of 66: 1, 2, 3, 6, 11, 22, 33

Sum of factors of 66 = 144

Sum of proper factors of 66 = 78

66 is an abundant number.

66 is a triangular number.  $66 = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11$

66 is a palindromic number.

A dysprosium (Dy) atom has 66 protons.

**67 (sixty seven)**

67 is a natural number.

67 is the successor of 66.

67 is the predecessor of 68.

67 is an odd number.

67 is a prime number.

Factors of 67: 1, 67

Proper factor of 67: 1

Sum of factors of 67 = 68

Sum of proper factors of 67 = 1

67 is a deficient number.

A holmium (Ho) atom has 67 protons.

**68 (sixty eight)**

68 is a natural number.

68 is the successor of 67.

68 is the predecessor of 69.

68 is an even number.

68 is a composite number.

Prime factorization:  $68 = 2 \times 2 \times 17$

Factors of 68: 1, 2, 4, 17, 34, 68

Proper factors of 68: 1, 2, 4, 17, 34

Sum of factors of 68 = 126

Sum of proper factors of 68 = 58

68 is a deficient number.

An erbium (Er) atom has 68 protons.

**69 (sixty nine)**

69 is a natural number.  
69 is the successor of 68.  
69 is the predecessor of 70.  
69 is an odd number.  
69 is a composite number.  
Prime factorization:  $69 = 3 \times 23$   
Factors of 69: 1, 3, 23, 69  
Proper factors of 69: 1, 3, 23  
Sum of factors of 69 = 96  
Sum of proper factors of 69 = 27  
69 is a deficient number.  
A thulium (Tm) atom has 69 protons.

### **70 (seventy)**

70 is a natural number.  
70 is the successor of 69.  
70 is the predecessor of 71.  
70 is an even number.  
70 is a composite number.  
Prime factorization:  $70 = 2 \times 5 \times 7$   
Factors of 70: 1, 2, 5, 7, 10, 14, 35, 70  
Proper factors of 70: 1, 2, 5, 7, 10, 14, 35  
Sum of factors of 70 = 144  
Sum of proper factors of 70 = 74  
70 is an abundant number.  
A ytterbium (Yb) atom has 70 protons.

### **71 (seventy one)**

71 is a natural number.  
71 is the successor of 70.  
71 is the predecessor of 72.  
71 is an odd number.  
71 is a prime number.  
71 is an emirp. (17 is a prime number.)  
Factors of 71: 1, 71  
Proper factor of 71: 1  
Sum of factors of 71 = 72  
Sum of proper factors of 71 = 1  
71 is a deficient number.  
A lutetium (Lu) atom has 71 protons.

### **72 (seventy two)**

72 is a natural number.  
72 is the successor of 71.  
72 is the predecessor of 73.

72 is an even number.

72 is a composite number.

Prime factorization:  $72 = 2 \times 2 \times 2 \times 3 \times 3$

Factors of 72: 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72

Proper factors of 72: 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36

Sum of factors of 72 = 195

Sum of proper factors of 72 = 123

72 is an abundant number.

A hafnium (Hf) atom has 72 protons.

### **73 (seventy three)**

73 is a natural number.

73 is the successor of 72.

73 is the predecessor of 74.

73 is an odd number.

73 is a prime number.

73 is an emirp. (37 is a prime number.)

Factors of 73: 1, 73

Proper factor of 73: 1

Sum of factors of 73 = 74

Sum of proper factors of 73 = 1

73 is a deficient number.

A tantalum (Ta) atom has 73 protons.

### **74 (seventy four)**

74 is a natural number.

74 is the successor of 73.

74 is the predecessor of 75.

74 is an even number.

74 is a composite number.

Prime factorization:  $74 = 2 \times 37$

Factors of 74: 1, 2, 37, 74

Proper factors of 74: 1, 2, 37

Sum of factors of 74 = 114

Sum of proper factors of 74 = 40

74 is a deficient number.

A tungsten (W) atom has 74 protons.

### **75 (seventy five)**

75 is a natural number.

75 is the successor of 74.

75 is the predecessor of 76.

75 is an odd number.

75 is a composite number.

Prime factorization:  $75 = 3 \times 5 \times 5$

Factors of 75: 1, 3, 5, 15, 25, 75

Proper factors of 75: 1, 3, 5, 15, 25

Sum of factors of 75 = 124

Sum of proper factors of 75 = 49

75 is a deficient number.

A rhenium (Re) atom has 75 protons.

### **76 (seventy six)**

76 is a natural number.

76 is the successor of 75.

76 is the predecessor of 77.

76 is an even number.

76 is a composite number.

Prime factorization:  $76 = 2 \times 2 \times 19$

Factors of 76: 1, 2, 4, 19, 38, 76

Proper factors of 76: 1, 2, 4, 19, 38

Sum of factors of 76 = 140

Sum of proper factors of 76 = 64

76 is a deficient number.

76 trombones led the big parade.

An osmium (Os) atom has 76 protons.

### **77 (seventy seven)**

77 is a natural number.

77 is the successor of 76.

77 is the predecessor of 78.

77 is an odd number.

77 is a composite number.

Prime factorization:  $77 = 7 \times 11$

Factors of 77: 1, 7, 11, 77

Proper factors of 77: 1, 7, 11

Sum of factors of 77 = 96

Sum of proper factors of 77 = 19

77 is a deficient number.

77 is a palindromic number.

77 is the sum of the first 8 prime numbers.  $77 = 2 + 3 + 5 + 7 + 11 + 13 + 17 + 19$

An iridium (Ir) atom has 77 protons.

### **78 (seventy eight)**

78 is a natural number.

78 is the successor of 77.

78 is the predecessor of 79.

78 is an even number.

78 is a composite number.

Prime factorization:  $78 = 2 \times 3 \times 13$

Factors of 78: 1, 2, 3, 6, 13, 26, 39, 78

Proper factors of 78: 1, 2, 3, 6, 13, 26, 39

Sum of factors of 78 = 168

Sum of proper factors of 78 = 90

78 is an abundant number

78 is a triangular number.  $78 = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11 + 12$

A platinum (Pt) atom has 78 protons.

### **79 (seventy nine)**

79 is a natural number.

79 is the successor of 78.

79 is the predecessor of 80.

79 is an odd number.

79 is a prime number.

79 is an emirp. (97 is a prime number.)

Factors of 79: 1, 79

Proper factor of 79: 1

Sum of factors of 79 = 80

Sum of proper factors of 79 = 1

79 is a deficient number.

A gold (Au) atom has 79 protons.

### **80 (eighty)**

80 is a natural number.

80 is the successor of 79.

80 is the predecessor of 81.

80 is an even number.

80 is a composite number.

Prime factorization:  $80 = 2 \times 2 \times 2 \times 2 \times 5$

Factors of 80: 1, 2, 4, 5, 8, 10, 16, 20, 40, 80

Proper factors of 80: 1, 2, 4, 5, 8, 10, 16, 20, 40

Sum of factors of 80 = 186

Sum of proper factors of 80 = 106

80 is an abundant number.

A mercury (Hg) atom has 80 protons.

### **81 (eighty one)**

81 is a natural number.

81 is the successor of 80.

81 is the predecessor of 82.

81 is an odd number.

81 is a composite number.

Prime factorization:  $81 = 3 \times 3 \times 3 \times 3$

Factors of 81: 1, 3, 9, 27, 81

Proper factors of 81: 1, 3, 9, 27

Sum of factors of 81 = 121

Sum of proper factors of 81 = 40

81 is a deficient number.

81 is a square number:  $81 = 9 \times 9 = 9^2$

81 is the sum of the first 9 odd numbers.  $81 = 1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17$

A thallium (Tl) atom has 81 protons.

### **82 (eighty two)**

82 is a natural number.

82 is the successor of 81.

82 is the predecessor of 83.

82 is an even number.

82 is a composite number.

Prime factorization:  $82 = 2 \times 41$

Factors of 82: 1, 2, 41, 82

Proper factors of 82: 1, 2, 41

Sum of factors of 82: 126

Sum of proper factors of 82: 44

82 is a deficient number.

A lead (Pb) atom has 82 protons.

### **83 (eighty three)**

83 is a natural number.

83 is the successor of 82.

83 is the predecessor of 84.

83 is an odd number.

83 is a prime number.

Factors of 83: 1, 83

Proper factor of 83: 1

Sum of factors of 83 = 84

Sum of proper factors of 83 = 1

83 is a deficient number.

A bismuth (Bi) atom has 83 protons.

### **84 (eighty four)**

84 is a natural number.

84 is the successor of 83.

84 is the predecessor of 85.

84 is an even number.

84 is a composite number.

Prime factorization:  $84 = 2 \times 2 \times 3 \times 7$

Factors of 84: 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84

Proper factors of 84: 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42

Sum of factors of 84 = 224

Sum of proper factors of 84 = 140

84 is an abundant number.

A polonium (Po) atom has 84 protons.

### **85 (eighty five)**

85 is a natural number.

85 is the successor of 84.

85 is the predecessor of 86.

85 is an odd number.

85 is a composite number.

Prime factorization:  $85 = 5 \times 17$

Factors of 85: 1, 5, 17, 85

Proper factors of 85: 1, 5, 17

Sum of factors of 85 = 108

Sum of proper factors of 85 = 23

85 is a deficient number.

An astatine (At) atom has 85 protons.

### **86 (eighty six)**

86 is a natural number.

86 is the successor of 85.

86 is the predecessor of 87.

86 is an even number.

86 is a composite number.

Prime factorization:  $86 = 2 \times 43$

Factors of 86: 1, 2, 43, 86

Proper factors of 86: 1, 2, 43

Sum of factors of 86 = 132

Sum of proper factors of 86 = 46

86 is a deficient number.

A radon (Rn) atom has 86 protons.

### **87 (eighty seven)**

87 is a natural number.

87 is the successor of 86.

87 is the predecessor of 88.

87 is an odd number.

87 is a composite number.

Prime factorization:  $87 = 3 \times 29$

Factors of 87: 1, 3, 29, 87

Proper factors of 87: 1, 3, 29

Sum of factors of 87 = 120

Sum of proper factors of 87 = 33

87 is a deficient number.

A francium (Fr) atom has 87 protons.



**88 (eighty eight)**

88 is a natural number.  
88 is the successor of 87.  
88 is the predecessor of 89.  
88 is an even number.  
88 is a composite number.  
Prime factorization:  $88 = 2 \times 2 \times 2 \times 11$   
Factors of 88: 1, 2, 4, 8, 11, 22, 44, 88  
Proper factors of 88: 1, 2, 4, 8, 11, 22, 44  
Sum of factors of 88 = 180  
Sum of proper factors of 88 = 92  
88 is an abundant number.  
88 is a palindromic number.  
A radium (Ra) atom has 88 protons.

**89 (eighty nine)**

89 is a natural number.  
89 is the successor of 88.  
89 is the predecessor of 90.  
89 is an odd number.  
89 is a prime number.  
Factors of 89: 1, 89  
Proper factor of 89: 1  
Sum of factors of 89 = 90  
Sum of proper factors of 89 = 1  
89 is a deficient number.  
89 is a Fibonacci number.  
An actinium (Ac) atom has 89 protons.

**90 (ninety)**

90 is a natural number.  
90 is the successor of 89.  
90 is the predecessor of 91.  
90 is an even number.  
90 is a composite number.  
Prime factorization:  $90 = 2 \times 3 \times 3 \times 5$   
Factors of 90: 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90  
Proper factors of 90: 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45  
Sum of factors of 90 = 234  
Sum of proper factors of 90 = 144  
90 is an abundant number.  
90 degrees is the measure of a right triangle.  
A thorium (Th) atom has 90 protons.

**91 (ninety one)**

91 is a natural number.

91 is the successor of 90.

91 is the predecessor of 92.

91 is an odd number.

91 is a composite number

Prime factorization:  $91 = 7 \times 13$

Factors of 91: 1, 7, 13, 91

Proper factors of 91: 1, 7, 13

Sum of factors of 91 = 112

Sum of proper factors of 91 = 21

91 is a deficient number.

91 is a triangular number.  $91 = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11 + 12 + 13$

91 is the sum of the first 6 square numbers.  $91 = 1 + 4 + 9 + 16 + 25 + 36$

A protactinium (Pa) atom has 91 protons.

## 92 (ninety two)

92 is a natural number.

92 is the successor of 91.

92 is the predecessor of 93.

92 is an even number.

92 is a composite number.

Prime factorization:  $92 = 2 \times 2 \times 23$

Factors of 92: 1, 2, 4, 23, 46, 92

Proper factors of 92: 1, 2, 4, 23, 46

Sum of factors of 92 = 168

Sum of proper factors of 92 = 76

92 is a deficient number.

A uranium (U) atom has 92 protons.

## 93 (ninety three)

93 is a natural number.

93 is the successor of 92.

93 is the predecessor of 94.

93 is an odd number.

93 is a composite number.

Prime factorization:  $93 = 3 \times 31$

Factors of 93: 1, 3, 31, 93

Proper factors of 93: 1, 3, 31

Sum of factors of 93 = 128

Sum of proper factors of 93 = 35

93 is a deficient number.

A neptunium (Np) atom has 93 protons.

## 94 (ninety four)

94 is a natural number.

94 is the successor of 93.  
94 is the predecessor of 95.  
94 is an even number.  
94 is a composite number.  
Prime factorization:  $94 = 2 \times 47$   
Factors of 94: 1, 2, 47, 94  
Proper factors of 94: 1, 2, 47  
Sum of factors of 94 = 144  
Sum of proper factors of 94 = 50  
94 is a deficient number.  
A plutonium (Pu) atom has 94 protons.

### **95 (ninety five)**

95 is a natural number.  
95 is the successor of 94.  
95 is the predecessor of 96.  
95 is an odd number.  
95 is a composite number.  
Prime factorization:  $95 = 5 \times 19$   
Factors of 95: 1, 5, 19, 95  
Proper factors of 95: 1, 5, 19  
Sum of factors of 95 = 120  
Sum of proper factors of 95 = 25  
95 is a deficient number.  
An americium (Am) atom has 95 protons.

### **96 (ninety six)**

96 is a natural number.  
96 is the successor of 95.  
96 is the predecessor of 97.  
96 is an even number.  
96 is a composite number.  
Prime factorization:  $96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$   
Factors of 96: 1, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48, 96  
Proper factors of 96: 1, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48  
Sum of factors of 96 = 252  
Sum of proper factors of 96 = 156  
96 is an abundant number.  
A curium (Cm) atom has 96 protons.

### **97 (ninety seven)**

97 is a natural number.  
97 is the successor of 96.  
97 is the predecessor of 98.  
97 is an odd number.

97 is a prime number.

97 is an emirp. (79 is a prime number.)

Factors of 97: 1, 97

Proper factor of 97: 1

Sum of factors of 97 = 98

Sum of proper factors of 97 = 1

97 is a deficient number.

A berkelium (Bk) atom has 97 protons.

### **98 (ninety eight)**

98 is a natural number.

98 is the successor of 97.

98 is the predecessor of 99.

98 is an even number.

98 is a composite number.

Prime factorization:  $98 = 2 \times 7 \times 7$

Factors of 98: 1, 2, 7, 14, 49, 98

Proper factors of 98: 1, 2, 7, 14, 49

Sum of factors of 98 = 171

Sum of proper factors of 98 = 73

98 is a deficient number.

A californium (Cf) atom has 98 protons.

### **99 (ninety nine)**

99 is a natural number.

99 is the successor of 98.

99 is the predecessor of 100.

99 is an odd number.

99 is a composite number.

Prime factorization:  $99 = 3 \times 3 \times 11$

Factors of 99: 1, 3, 9, 11, 33, 99

Proper factors of 99: 1, 3, 9, 11, 33

Sum of factors of 99 = 156

Sum of proper factors of 99 = 57

99 is a deficient number.

99 is a palindromic number.

An einsteinium (Es) atom has 99 protons.

## Special Numbers in the Set of Natural Numbers 1 to 99 | [TOC](#)

For definitions of these special numbers, go down yonder to the [Glossary](#).

The one and only 1

Prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97

Palprime: 11

Emirps: 13, 17, 31, 37, 71, 73, 79, 97

Emirp pairs: 13 and 31, 17 and 71, 37 and 73, 79 and 97

Square numbers: 1, 4, 9, 16, 25, 36, 49, 64, 81

Sums of consecutive odd numbers (see note 1): 1, 4, 9, 16, 25, 36, 49, 64, 81

Cubic numbers: 1, 8, 27, 64

Powers of 2: 1, 2, 4, 8, 16, 32, 64

Triangular numbers: 1, 3, 6, 10, 15, 21, 28, 36, 45, 55, 66, 78, 91

Perfect numbers: 6, 28

Factorial numbers: 1, 2, 6, 24

Fibonacci numbers: 1, 2, 3, 5, 8, 13, 21, 34, 55, 89

Sums of consecutive prime numbers (see note 2): 2, 5, 10, 17, 28, 41, 58, 77

Palindromic numbers: 11, 22, 33, 44, 55, 66, 77, 88, 99

Note 1. Example:  $16 = 1 + 3 + 5 + 7$

Note 2. Example:  $28 = 2 + 3 + 5 + 7 + 11$

## Glossary | [TOC](#)

**abundant number 1:** a natural number  $n$  for which the sum of the factors of  $n$  is greater than  $2n$ . **2:** a natural number  $n$  for which the sum of the proper factors of  $n$  is greater than  $n$ .

**composite number 1:** a natural number greater than 1 that has factors other than 1 and the number itself. **2:** a natural number that has three or more *different* factors.

**cubic number:** a number that can be written as the cube of a natural number. Cubic numbers are 1, 8, 27, 64, and so on.  $1 = 1^3$ ,  $8 = 2^3$ ,  $27 = 3^3$ ,  $64 = 4^3$ , and so on.

**deficient number 1:** a natural number  $n$  for which the sum of the factors of  $n$  is less than  $2n$ . **2:** a natural number  $n$  for which the sum of the proper factors of  $n$  is less than  $n$ .

**emirp 1:** a prime number that is the reverse of a different prime number. **2:** a prime number obtained by writing the digits of a different prime number in reverse order (right to left instead of left to right). Examples: 13 and 31, 37 and 73.

**factorial number:** If  $n$  is a natural number, then  $n$  factorial, written  $n!$ , is the product of the natural numbers from 1 to  $n$ .  $1! = 1$ ,  $2! = 1 \times 2 = 2$ ,  $3! = 1 \times 2 \times 3 = 6$ ,  $4! = 1 \times 2 \times 3 \times 4 = 24$ .

**factor:** If you multiply two or more natural numbers, the product is a natural number. The numbers you multiplied to obtain the product are factors of the product. Example:  $2 \times 3 = 6$ , so 2 and 3 are factors of 6. Example:  $2 \times 3 \times 5 = 30$ , so 2, 3, and 5 are factors of 30. If  $a \times b = c$ , then  $a$  and  $b$  are factors of  $c$ .

**Fibonacci number:** the numbers 1, 1, 2, 3, 5, 8, 13, and so on. After the second number (1), each number is the sum of the preceding two numbers.

**palprime:** a prime number that when reversed (read right to left instead of left to right) is the same prime number. Example: 11.

**perfect number 1:** a natural number  $n$  for which the sum of the factors of  $n$  is equal to  $2n$ . **2:** a natural number  $n$  for which the sum of the proper factors of  $n$  is equal to  $n$ .

**predecessor:** Every natural number *except 1* has a predecessor that is one less than the natural number. If  $n$  is a natural number, then its predecessor is  $n - 1$ . Examples: 1 is the predecessor of 2, 2 is the predecessor of 3, 3 is the predecessor of 4, ... , 98 is the predecessor of 99.

**prime number 1:** a natural number that has exactly two different factors. **2:** a natural number greater than 1 whose only factors are 1 and the number itself.

**proper factor:** a factor of a natural number other than the number itself. A proper factor of a number is a factor that is less than the number.

**natural number:** the numbers 1, 2, 3, 4, 5, and so on forever. They keep going and going and going, never ending. Natural numbers are also called counting numbers and positive integers.

**square number:** a number that can be written as the square of a natural number. Square numbers are 1, 4, 9, 16, 25, and so on.  $1 = 1^2$ ,  $4 = 2^2$ ,  $9 = 3^2$ ,  $16 = 4^2$ , and so on.

**successor:** Every natural number has a successor that is one more than the natural number. If  $n$  is a natural number, then its successor is  $n + 1$ . Examples: 2 is the successor of 1, 3 is the successor of 2, 4 is the successor of 3, ... , 99 is the successor of 98.

**triangular number:** the numbers 1, 3, 6, 10, 15, and so on. Triangular numbers can be represented by triangles having 1 dot, 3 dots, 6 dots, 10 dots, 15 dots, and so on. The first triangular number is 1. A triangular number greater than 1 is the sum of consecutive natural numbers beginning with 1. Examples:  $3 = 1 + 2$ ,  $6 = 1 + 2 + 3$ ,  $10 = 1 + 2 + 3 + 4$ .

**END**