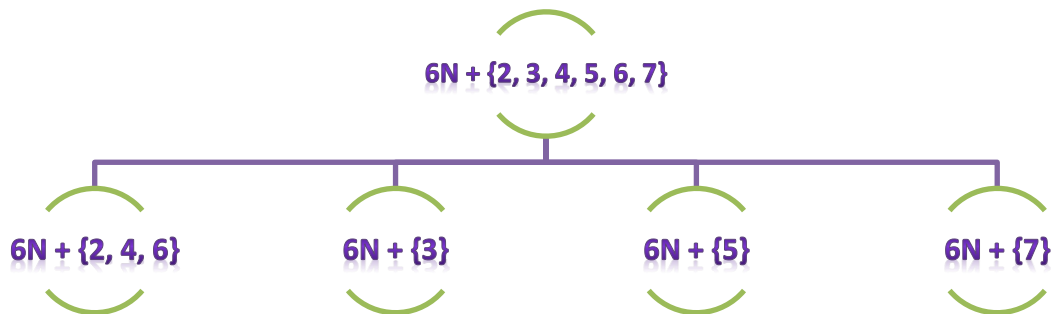


# NATURAL NUMBERS



$$N = (6N + \{2, 3, 4, 5, 6, 7\}) \cup \{1, 2, 3, 4, 5, 6, 7\}$$

$$N \setminus \{1, 2, 3, 4, 5, 6, 7\} = \{(2^*3^*2^n*3^m*5^s*7^t*p_u*p_i; n, m, s, t \in (N \cup \{0\}), p_u \in Pu, p_i \in (Pu \times Pu)) + \{2, 3, 4, 5, 6, 7\}\}$$

$$Pu = (P \cup \{1\}) \setminus \{2, 3, 5, 7\}$$

$$N2 = (6N + \{2, 4, 6\}) \cup \{4, 6\}$$

$$N2 = \{(2^*2^n*3^m*5^s*7^t*p_u*p_i); n, m, s, t \in (N \cup \{0\}), p_u \in Pu, p_i \in (Pu \times Pu)\}$$

$$N3 = (6N + \{3\})$$

$$N3 = \{(3^*3^m*5^s*7^t*p_u*p_i); m, s, t \in (N \cup \{0\}), p_u \in Pu, p_i \in (Pu \times Pu)\}$$

$$N5 = \{(10n + 15; n \neq 3k; k \in N)\}$$

$$N5 = \{(5^*5^s*7^t*p_u*p_i); s, t \in (N \cup \{0\}), p_u \in Pu, p_i \in (Pu \times Pu)\}$$

$$N7 = \{(14n + 35; n \neq 5k; n \neq 6k + 2; k \in (N \cup \{0\}))\}$$

$$N7 = \{(7^{*7^t} p_u^* p_i); t \in (N \cup \{0\}), p_u \in Pu, p_i \in (Pu \times Pu)\}$$

$$N5 \cup N7 \cup PU \cup (PU \times PU) \subset ((6N + \{5\}) \cup (6N + \{7\}))$$

$$6N + \{5\} = 6(N5 + \{5\}) \cup 6(N5 + \{5\})$$

$$6N + \{7\} = 6(N7 + \{5\}) \cup 6(N7 + \{5\})$$

$$(PU \cup (PU \times PU)) \subset (6(N5 + \{5\}) \cup 6(N7 + \{7\}))$$

$$((6N + \{5\}) \cup (6N + \{7\})) =$$

$$= 6(N + \{1\}) \pm \{1\} =$$

$$= 6(N \setminus \{1\}) \pm \{1\} = (6N \setminus \{6\}) \pm \{1\} =$$

$$= (6N \pm \{1\}) \setminus \{5, 7\}$$

$$6N \pm \{1\} = 6(N2 \cup N2) \pm \{1\} =$$

$$= (6N2 \pm \{1\}) \cup (6N2 \pm \{1\}) =$$

$$= (12N \pm \{1\}) \cup (6(N3 \cup N5 \cup N7 \cup Pu \cup (Pu \times Pu)) \pm \{1\}) =$$

$$= (12N \pm \{1\}) \cup (6N3 \pm \{1\}) \cup (6N5 \pm \{1\}) \cup (6N7 \pm \{1\}) \cup (6Pu \pm \{1\}) \cup (6(Pu \times Pu) \pm \{1\}) =$$

$$= (12N \pm \{1\}) \cup (6Pu \pm \{1\}) \cup (6(Pu \times Pu) \pm \{1\}) \cup (6N(6N + \{3\}) \pm \{1\}) \cup (6(10N + \{15\}) \pm \{1\}) \cup (6(14N + \{35\}) \pm \{1\}) =$$

$$= (12N \pm \{1\}) \cup (Pu \pm \{6\}) \cup ((Pu \times Pu) \pm \{6\}) \cup (36N + \{17, 19\}) \cup$$

$$\cup (60N + \{89, 91\}) \cup (84N + \{209, 211\})$$