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Let $\mathbb{N}$ denote the set of nonnegative integers. A numerical semigroup is a subset S of $\mathbb{N}$ closed under addition, it contains the zero element and has finite complement in $\mathbb{N}$. Given a nonempty subset A of $\mathbb{N}$ we will denote by $\langle A \rangle$ the submonoid of $(\mathbb{N}, +)$ generated by A, that is,

$$\langle A \rangle = \{\lambda_1 a_1 + \cdots + \lambda_n a_n \mid n \in \mathbb{N} \backslash \{0\}, a_i \in A, \lambda_i \in \mathbb{N} \text{ for all } i \in \{1, \ldots, n\}\}.$$

The Frobenius coin problem consists in finding a formula, in terms of the elements in a minimal system of generators of S, for computing the Frobenius number and the genus. In this talk we will present some classes of numerical semigroups for which this problem is solved. We give formulas for the Frobenius number, the type and the genus for MED-semigroups, Mersenne numerical semigroups, Thabit numerical semigroups, Repunit numerical semigroups and numerical semigroups with multiplicity four.