Using the Newton polyhedron method we consider asymptotics of trajectories in a vicinity of isolated equilibrium $O(0, 0, 0)$ of a polynomial vector field $V(X_1, X_2, X_3)$ defined by the system of ordinary differential equations with the right hands: $X_1(\bar{x}) \equiv x_1P(\bar{x}), \ X_2(x) \equiv x_2Q(\bar{x}), \ X_3(\bar{x}) \equiv x_3R(\bar{x})$, where $\bar{x} = (x_1, x_2, x_3).$ Newton polyhedron $\Gamma_{000}$ is associated with $V$. **Theorem.** Any orbit of $V(\bar{x})$ that tends to $O$ for $t \to \infty$ or $t \to -\infty$ in phase coordinates $(x_1, x_2, x_3)$ has either power or trivial asymptotics

$$x_2 = k_1 x_1^{\rho_1} (1 + o(1)), \ x_3 = k_2 x_1^{\rho_2} (1 + o(1)), \ \rho_1, \rho_2 > 0,$$

where $(\rho_1, \rho_2)$ is a vector-index of Newton polyhedron $\Gamma_{000}$, $k_1, k_2$ are constants. (Received September 25, 2018)