abstract Gravitational lensing in metric theories of gravity is discussed. I introduce a generalized approximate metric element, inclusive of both post-post-Newtonian (ppN) contributions and gravito-magnetic field. Following Fermat’s principle and standard hypotheses, I derive the time delay function and deflection angle caused by an isolated mass distribution. Several astrophysical systems are considered. In most of the cases, the gravito-magnetic correction offers the best perspectives for an observational detection. Actual measurements distinguish only marginally different metric theories one from another.