

## NOTES.

THE Toulouse Academy of Sciences announces for the year 1901 the following subject for its mathematical prize of five hundred francs :

“ The investigation of the families of surfaces possessing the property that all their orthogonal trajectories are plane curves, from one of the following points of view : 1° In order that all the surfaces defined in rectangular coördinates by the equation  $\rho = f(x, y, z)$ , where  $\rho$  is a parameter varying from one surface of the family to another, may have plane orthogonal trajectories, it is necessary that  $f$  should satisfy a partial differential equation of the third order. The study of this equation is proposed. 2° The perimorphic method may be employed, reference being made to the ‘ Mémoire sur la théorie générale des surfaces courbes ’ of Ribaucour (*Liouville's Journal*, ser. 4, vol. 7), particularly to chapter 13, entitled ‘ Recherches des trajectoires orthogonales planes des surfaces. ’ ”

Manuscripts may be written in French or Latin and must be deposited with the Secretary of the Academy before January 1, 1901. The usual conditions as to anonymity prevail.

AMONG the prize subjects announced by the Belgian Academy of Sciences for the year 1900 are two of mathematical character : 1° The history and theory of the variation of latitude. 2° The algebra and geometry of  $n$ -linear forms where  $n > 3$ . The prizes are gold medals of the value of six hundred francs each. Manuscripts may be written in French or Dutch, and must be sent to the Secretary of the Academy before August 1, 1900.

The second volume of the second edition of Professor H. WEBER'S *Lehrbuch der Algebra* has just appeared from the press of Vieweg und Sohn.

THE seventy-first meeting of the German association of naturalists and physicians will be held at Munich, September 18-23, 1899.

THE UNIVERSITY OF CHICAGO. During the four quarters (*su, a, w, sp*) of the year July, 1899-June, 1900, the following advanced mathematical courses (four or five hours weekly) will be offered :—By Professor MOORE : Algebraic numbers (introductory course, followed by a seminar) (*w*,