

only reading over the investigations and applying them to examples, XL. Interest, XLI. Annuities, XLIII, omitting § 589, 90, 97-99. Continued fractions, XLIV, XLV, omitting § 604-11 and 613-22. Indeterminate equations, XLVI to § 628. Partial fractions and indeterminate coefficients, XLVIII, with notes on partial fractions involving multiple and irrational roots. Summation of series, L, omitting § 661-4; 666, 670-1. Summation by finite differences without proof (Notes). Inequalities, LI to § 680. Note result of § 681.

Marks, December, 250.

SECTION H.

Plane Trigonometry (Todhunter.) I to XVI, omitting § 180-210, but reading them over for comparison with the Differential Calculus, and omitting XVI, § 251. Inverse Functions—Chapter XVIII, omitting § 264. Demoiivre's Theorem. Chapter XIX, § 266-8.

Marks, March, 250.

SECTION K.

Conics (Todhunter) and printed notes Straight Line—Chapter I to III. Transformation of co-ordinates; practical applications only, Chapter V.

Circle.—Chapters VI, VII, omitting § 119, except for definition and position of centres of similitude.

Parabola.—Chapter VIII—Notes, principally geometrical, as follows: Equations to the curve and tangent compared; $y y' = 2a(x+x')$; similarly for the circle and other conics. Equation to the normal.

Deduction of the general equation $(y-y')^2 = 4a(x-x')$ from the simplest equation $y^2 = 4ax$; similarly for all other curves, (x', y') being the origin for the simple equation.

Latus rectum as the parameter. Explanation of the constants in an equation, both those of size and form which are parameters and those of position which may be removed by choice of axes.

Construction of tangent; inclinations to axis and focal distance. Locus of the foot of the perpendicular from the focus. Portion of tangent intercepted between the point of contact and the directrix subtends a right angle at the focus. Tangents at the extremities of a focal chord are perpendicular

and meet upon the directrix. $p^2 = ar$; $r = \frac{a}{\sin^2 \theta}$; $r = a + x$.

Polar equation. Angle between two radii vectores is double that between the tangents. Sub-normal $= 2a$. Sub-tangent