What is accelerated, retarded or relative motion? Explain the mechanical powers? Show by a diagram the effect that the attraction of a distant body would have on the motion of a smaller one revolving round a larger?

Arithmetic. Explain the method of making compound interest tables. What is the logarithm of 67584632? What number corresponds to

$$4 \cdot 752386 ; \quad \sqrt[13]{52826} ; \quad \sqrt[7]{\frac{(\frac{2 3}{4 8})^2 + \frac{3}{4} - 253}{\sqrt[5]{\frac{7}{64}} + \frac{1}{2} + 4\frac{1}{2}}} ; \quad 258^4 ?$$

Change 9et84t2 in the duodecimal scale to the other scales from the binary to the undinary inclusive. Algebra: let $a =$ the first term, $d =$ the common difference, $r =$ the ratio, $l =$ the last term, $n =$ the number of terms, and $s =$ the sum of a series;—find the principal formulæ in geometrical and arithmetical progression?

$$\frac{\sqrt{x} + \sqrt{x - a}}{\sqrt{x} - \sqrt{x - a}} = \frac{n^2 a}{x - a}. \quad \text{Find } x.$$

$$x^{\frac{2}{3}} + x^{\frac{3}{2}} = 756. \quad \text{Find } x.$$

$$x^{2n} - 2 x^n = a. \quad \text{Find } x.$$

$$x^2 + 2 x y = 84$$
$$3 x y - 2 y^2 = 56.$$
$$\text{Find } x \text{ and } y.$$

$$3 (x^2 - 4 x + 6)^2 + 4 (x^2 - 4 x + 6) = 407. \quad \text{Find } x.$$

$$x^2 - y^2 = 3, \text{ and } (x^4 + y^4)^2 + x^2 y^2 (x^2 - y^2)^2 + x^2 - y^2 = 328.$$
$$\text{To find } x \text{ and } y.$$

Find by French's theorem the co-efficients of $(2 x + 3 y)^5$.

The prize in mensuration will be given by a gentleman who will propose the questions himself on the day of examination.

I give one from my papers. The radius of a circle is 25 yards: what is the difference between $\frac{1}{4}$ of the inscribed square and one of the segments cut off by it?

I hope, my Lord and Gentlemen, that you will agree with me in saying the progress made by my pupils is satisfactory.

From one of the Society's oldest Teachers :

LACADIE.

Sir,—I must say that the last half of this year the school has been well attended (save the harvest months) particularly by the children who are preparing for Confirmation. I have thirteen from