

6. Can a correct answer be given to a question similar to the following: "If 6 were 8 what would 11 be?"

7. Mr. J. R. Smith, Teacher, York County, asks if the principle adopted in the solution of Problem 3 on page 231 of Smith's Canadian Arithmetic is correct. It is his opinion that it is not.

8. Explain the meaning and construction of 'Feed a cold and starve a fever.' J. C. GLASHAN.

9. What is the force of 'And' in the first line of 'Address to a Mummy?' (Fifth Reader page 5.) J. C. GLASHAN.

10. Under what circumstances is the article placed between the adjective and its noun? Ex. 'How strange astory.' J. C. GLASHAN.

11. What difference is there in the style of address of Prince John to Locksley and of Locksley's replies? Why is this? Explain the derivation and force of *Sith* and *An*. Parse *even* in 'Even Prince John lost his dislike.' (Fifth Reader, pages 363-365.) J. C. GLASHAN.

12. What were Harold Godwin's claims to the English Crown? J. C. GLASHAN.

13. When did the Cabots discover America? J. C. GLASHAN.

14. Where was Prima Vista? J. C. GLASHAN.

ANSWERS AND SOLUTIONS.

1. Mr. Wm. S. Howell, Teacher No. 13, Sophiasburgh, Prince Edward County, sends us a correct solution of this Problem. Interest on each debenture is calculated at simple interest, and the amount of each when due will be represented by 100 (1 + rt). The Present Worth of each can then be found separately by the Formula $A \div ((1 \div r)^t)$ raised to the t th power). The sum of the several results thus obtained is \$636.02, the correct answer. If the debentures were discounted at 8 per cent. simple interest, the answer would be \$659.58. Miss Bella Boon, Teacher, Middlesex, also sends a solution correct in theory, but by a slight error in working the answer is made a few cents too large. Mr. Stewart Moag, Teacher, Smith's Falls, also sends a proved solution, but the discount is calculated at simple instead of compound interest.

7. We would say in reply, the principle adopted is not correct, neither is the work accurately performed.

EDITOR'S DRAWER.

A MATHEMATICAL DEPARTMENT.—In reference to this subject, we can not do better than submit the following communication from J. C. Glashan Esq., Inspector, West Middlesex. His suggestions are at once so good and so feasible that we are prepared, to a great extent, to adopt them. We are also pleased to say that Mr. Glashan has consented to take special charge of the mathematical department, a task for which he is singularly well qualified. He has given the subject special attention, is in receipt of several first-class mathematical magazines, by which he is at all times enabled to keep abreast with the progress of the science, and is well known for his mathematical contributions to the JOURNAL OF EDUCATION. But we will let him speak for himself:

To the Editors of the Ontario Teacher.

GENTLEMEN,—I see by a paragraph in the "Drawer" that you have been asked to open a mathematical department. Now, if we consider that Arithmetic is one of the test subjects in the examinations of candidates for second class certificates of qualification, as teachers, and that in the last examination a majority of the failures arose from the Arithmetic Paper, (by no means a really difficult

one,) your correspondent's proposal seems good. But a difficulty occurs to me which did not strike him,—the extra expense this would entail on you. Some of your readers may not know exactly what they are asking in inviting you to open such a department; permit me, Gentlemen, to tell them a little of it. A first cost of at least two extra founts of very expensive type, of little use but in mathematics; and a current expense equal to at least three pages of text for every page of the department, or say, if you give a page to it, the increase of your Magazine from a thirty-two page to a thirty-four page Monthly, without any corresponding increase in its price.—Here is the *experience* of the editor of an English mathematical magazine;—Complicated mathematical formulæ "take up a great deal of room, are very troublesome to the printer, and when set up are liable to become disarranged, unless the symbols are very carefully justified; and if even slightly disarranged, become very confused. The cost of setting up a difficult page of mathematics is often three times that of an ordinary page of text, and this sometimes on an average all through a paper." And this gentleman had at his command, not only all the conveniences of an extensive mathematical publishing establishment, but also composit-