slight hissing noise, gradually increasing in intensity and culminating with a sharp crack and a flash of blue light. The whole was strongly suggestive of the gradual charge and sudden discharge of a condenser. Observations were not made continuously, the writer being mainly interested in the installation of his radio, but five or six successive trials showed the phenomenon to last apparently continuously for a period of about four hours, from about four o'clock in the afternoon until about eight in the evening, well after nightfall.

The antenna was four-stranded, about one hundred feet long, of solid aluminum wire, and strung about ten feet above a thirty-foot house, the roof of which was of copper and grounded. The sky was overcast at the time; there was no wind and the atmosphere was heavily charged with moisture. The time of year was not one in which there are electrical disturbances in that locality, nor did any electrical storm precede or follow the observations for a period of many weeks.

The writer explained the phenomenon at the time as due to the gradual leakage of electricity from a highly charged layer through the moist air to the ground. The conducting antenna, being in an area of slightly higher potential, became gradually charged with respect to the ground. When this charge reached a sufficient magnitude, a brush discharge set in across the gap, increasing in intensity as the charge increased until it was able completely to overcome the resistance of the gap, when the whole escaped to the ground with the accompanying spark. The process was then repeated at a rate proportionate to the rate of leakage through the air.

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EDUCATIONAL SCIENCE!

DURING the last few days the freshmen in the college of arts and science at the University of Pennsylvania have been subjected to a series of achievement tests as part of the Pennsylvania state survey of relationship between secondary schools and colleges. This survey is in charge of the Carnegie Foundation for the Advancement of Teaching in cooperation with the College President's Association of Pennsylvania and the Pennsylvania State Department of Education. Similar tests were given to all freshmen in many other colleges and universities in the state.

Among the tests given was the Columbia Research Bureau Plane Geometry Test by Herbert E. Hawkes, Ph.D. (professor of mathematics and dean of Columbia College) and Ben D. Wood, Ph.D. (associate professor and director of Bureau of Collegiate Educational Research, Columbia College, Columbia University). Test Form B for High Schools and Colleges was employed in this examination. Part II is concerned with problems. A sample problem is worked out at the top of the page. This reads: "Sample. How many degrees are there in four right angles?—(180)." There is no chance of this being a printer's error inasmuch as "four" is printed out and the "180" is printed in script.

What I wish to raise is the question of marking the thirty-five problems involved in this part of the paper. The sponsors of this examination gave no instructions with regard to this error, hence we may suppose that it must be taken at its face value as a sample. This implies that all truly correct answers to the problems must be marked as incorrect! That is obvious. But what is to be scored as correct is not so apparent. Two possibilities present themselves: (1) All truly incorrect answers should be scored as correct; or (2) all correct answers must be divided by two in order to receive credit.

But seriously it seems inexcusable to me that such an error should not have been caught by either the authors or the publishers, especially when one considers that this alleged measuring instrument carries the copyright date of 1926. And the directions printed just above the sample question say in part: "This means that you must *check your arithmetical operations carefully* before putting down an answer." (Italics theirs!)

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SPECIAL CORRESPONDENCE

THE RECENT BONE-CAVERN FIND AT BISHOP'S CAP, NEW MEXICO

IT seems desirable at this time to make a brief preliminary announcement of what is believed to be an unusually significant bone-cavern find recently made in the lower slope of Bishop's Cap Peak in southwestern New Mexico by Mr. Roscoe P. Conkling, of El Paso, Texas.

Mr. Conkling, who for many years has been connected with the American Smelting and Refining Company, has had as a form of relaxation and recreation a very lively interest in the field study of archeology, coupled with a general interest in natural history, which in the course of his travels in connection with mining operations in remote fields has led him to examine and to study scores of burial