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The future of mathematics.

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The nature of mathematics as we know it in our time is such as to inspire us with a great curiosity concerning the future of our science. While our mathematical knowledge has continued to increase in a swelling tide which threatens sometimes to engulf us, we are almost daily made aware of new areas and new problems which intrigue and challenge our most highly developed mathematical talents. We feel that great discoveries lie but a few years or a few decades ahead, and perhaps we even tend to regard whatever we can accomplish ourselves as little more than stepping-stones to greater achievements in time to come. Thus for us mathematics lies quite as much in the future as in the present or the past, and we sometimes yearn for a glimpse of what the imagined triumphs of the mathematics of the future may be like. For a mathematician who, like myself, has rounded out his period of youthful energy and creativity this desire to peer into the future becomes all the stronger because he would like to see there the hidden answers to the problems which have defied his most intensive efforts at solution and which he can no longer hope to overcome himself. Of course, this desire is doomed to frustration. To a certain extent it may be possible to project current developments a little way into the future, but anyone would be very rash who would don the mantle of a prophet in a field such as mathematics where so much—one might say nearly all—depends on inspiration and the insights of genius. Nevertheless, we all gain a little by pausing to consider what is currently going on in mathematics and to estimate whither and how far it is likely to carry us in the immediate future. A little thoughtful speculation serves to suggest lines of research likely to be fruitful, or practical