Quadratic Functions and Climatology

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Abstract

Climatology and the quadratic equation are two things most people would not think of together. Both have very different time frames, with climatology being a comparatively new concept compared to the millennia of work and effort given to arrive at the quadratic formula. Climatologists also have other methods right now that can predict temperature patterns by the day, the month, or over a time frame of several months. In this experiment, the researcher could predict that the quadratic formula could be an accurate estimate for predicting hourly temperature changes based on the fact that temperatures, like a parabolic curve, move up and back down throughout the course of a day. Unfortunately, because of the constant movements of temperatures multiple times throughout the day, the quadratic formula's estimate only came close compared to the actual average around forty percent of the time. With time not being a limitation, it is possible that someone could complete a broader, more accurate experiment.