

QUADRATIC FUNCTIONS

▶ *How can you model the height of lava from an erupting volcano?*



CHAPTER

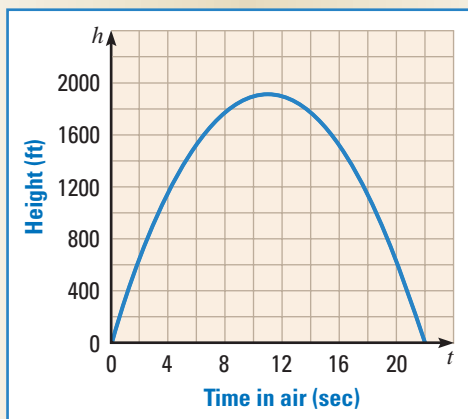
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APPLICATION: Volcanoes

Volcanic eruptions can eject lava hundreds of feet into the air, creating spectacular but dangerous "lava fountains." As the lava cools and hardens, it may accumulate to form the cone shape of a volcano.

Think & Discuss

The highest recorded lava fountain occurred during a 1959 eruption at Kilauea Iki Crater in Hawaii. The graph models the height of a typical lava fragment in the fountain while the fragment was in the air.



1. Estimate the lava fragment's maximum height above the ground.
2. For how long was the lava fragment in the air? How did you use the graph to get your answer?

Learn More About It

You will work with an equation modeling the height of lava in Exercise 80 on p. 297.



APPLICATION LINK Visit www.mcdougallittell.com for more information about volcanoes.