6. [7 points] Kiki is experimenting with a highly radioactive substance, Isotope-Z. Isotope-Z decays at a (non-continuous) rate of 20% per day.

    a. [3 points] Find the continuous decay rate of Isotope-Z. Give your answer as a **percentage** estimated to three decimal places or in exact form.

            The continuous decay rate of Isotope-Z is _____.

    b. [4 points] Find the amount of time it takes for Isotope-Z to decrease to 60% of the initial amount present. Do not assume the initial amount is any specific number. Be sure to show all your work and leave your answer in **exact** form with units.

            The amount of time is _____.