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2(1) Describe mandelbrot sets.

Ans The term mandelbrot set is used to refer both to a general class of fractal sets and to a particular instance of such a set in general a the corresponding julia set is connected and not computable.

The mandelbrot set is the set obtained from the "quadratic recurrence equation"

In the complex plane for which the orbit of z_n does not trend to infinity are in the set setting equal to any point in the set that is not a periodic point gives the same result

The mandel brot set was originally called a molecule by mandelbrot

The term mandelbrot set can also be applied to generalization of the mandel brot set in which the fn $f(z) = z^2 + c$ is replaced by $f(z) = \sin(z/c)$, $z_0 = c$, and c is allowed to vary in the en plan.