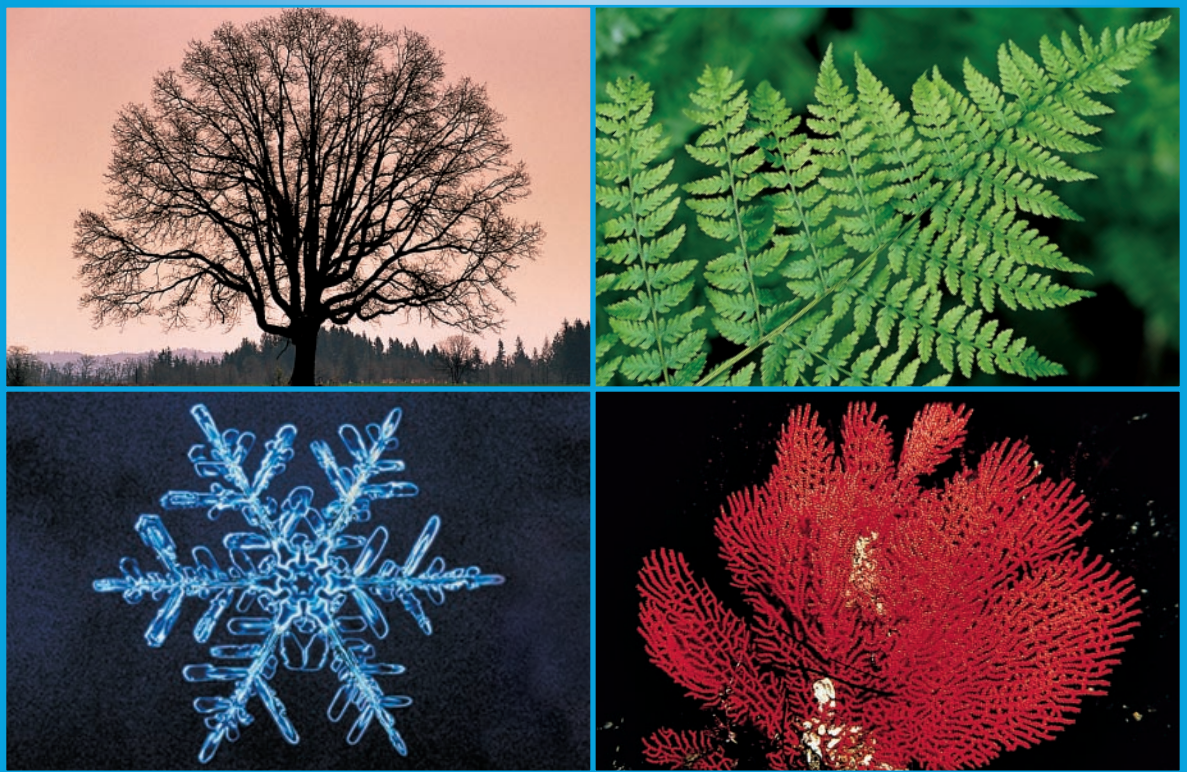


# SEQUENCES AND SERIES

► *How is a fractal formed?*



## CHAPTER

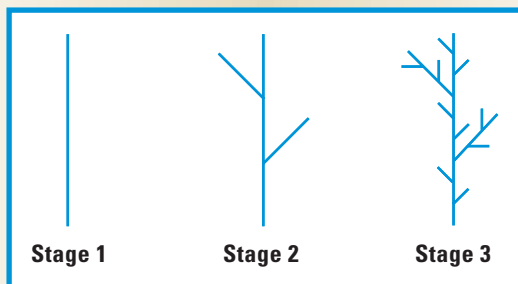
# 11

### APPLICATION: Fractals

*Have you ever noticed* how a fern leaf looks like a miniature version of the fern? When the parts of an object are similar to the whole object, the object is called *self-similar*. A *fractal* is a complex shape that basically looks the same at different levels of magnification and is generally self-similar.

#### Think & Discuss

The diagram shows the first three stages in the growth of a fractal plant.



1. Draw the next stage in the growth process.
2. Describe in words how the fractal plant changes from one stage to the next.
3. What could you do to make the fractal plant look even more realistic?

#### Learn More About It

You will find the number of branches in a fractal tree in Exercise 45 on p. 685.



**APPLICATION LINK** Visit [www.mcdougallittell.com](http://www.mcdougallittell.com) for more information about fractals.

