

More Patterns for sequences

For each of the following number sequences, find a pattern. Write a description of your pattern, and indicate whether or not the pattern is recursive. (A recursive pattern is one that only depends upon previous terms to determine the next term, and not the position number.) It will probably help if you use the sequence tables as we did in class.

a. 3, 6, 9, 12, 15, ...

b. 1, 2, 4, 8, 16, ...

c. 0, 1, 4, 9, 16, 25, 36, ...

d. 5, 8, 11, 14, 17, ...

e. 1, 10, 100, 1000, 10000, ...

f. 5, 55, 555, 5555, 55555, ...

g. 12, 6, 3, 1.5, 0.75, ...

h. $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}, \dots$