

Sec 9.4 For each of the following sequences:

- Write the next two terms
- Describe the pattern/rule to describe the sequence
- Find the limit of the sequence, if it exists.

- 27, 34, 41, 48, ...
- 243, 81, 27, 9, ...
- 80, 77, 74, 71, ...
- 4, 8, 16, 32, ...
- 0, 3, 7, 12, 18, ...
- 1, 4, 7, 10, 13, ...
- 100, 10, 1, .1, .01, ...
- $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \frac{1}{32}, \dots$
- 4, -8, 16, -32, 64, ...
- 1, 2, 6, 24, 120, ...
- 0, 1, 0, $\frac{1}{3}$, 0, $\frac{1}{5}$, ...
- 40, 20, 10, 5, $\frac{5}{2}$, ...
- 6, 1, -4, -9, ...
- $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}, \dots$
- $-\frac{5}{2}, -2, -\frac{3}{2}, -1, \dots$
- 2, 5, 10, 17, 26, ...
- 1, 8, 27, 64, 125, ...
- 75, -68, -61, -54, ...
- 1, 1, -1, 1, -1, 1, ...
- 49, 64, 81, 100, 121, ...

- $\frac{16}{5}, \frac{25}{6}, \frac{36}{7}, \frac{49}{8}$
- $\frac{5}{6}, \frac{4}{7}, \frac{3}{8}, \frac{2}{9}, \dots$
- J, F, M, A, M, ...
- triangle, quadrilateral, pentagon, hexagon, ...
- 1.5, 1.05, 1.005, 1.0005, ...