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20.) $N_t = 53(2^t)$, $t = 0, 1, 2, \dots$

24.) $N_t = 17(4^t)$, $t = 0, 1, 2, \dots$

35.) 3, 6, 12, 24, 48, 96

48.) $N_t = 7(2^t)$

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13.) $\frac{6}{7}, \frac{7}{8}, \frac{8}{9}, \frac{9}{10}$

14.) $\frac{36}{50}, \frac{49}{65}, \frac{64}{82}, \frac{81}{101}$

22.) $a_n = \frac{n+1}{2n+3}$

26.) $a_n = \frac{(-1)^n}{2(n+1)^2}$

34.) $a_0 = 1$, $a_1 = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$, $a_2 = \frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$, $a_3 = \frac{1}{2}$, $a_4 = \frac{1}{\sqrt{5}} = \frac{\sqrt{5}}{5}$,
 $\lim_{n \rightarrow \infty} a_n = 0$

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108.) Fixed points are 0, $\frac{1}{2}$. With $a_0 = 0$, the limit is 0.