1. a) Geometric

b) $f(x) = f(x-1) \cdot \dfrac{1}{4}$; $f(1) = 60$

c) $f(x) = 60 \left(\dfrac{1}{4} \right)^{x-1}$

3. a) Geometric

b) $f(x) = f(x-1) \cdot \dfrac{1}{5}$; $f(1) = 20$

c) $f(x) = 20 \left(\dfrac{1}{5} \right)^{x-1}$

5. a) Geometric

b) $f(x) = f(x-1) \cdot 4$; $f(-4) = 5$

c) $f(x) = 5 \cdot 4^{x+4}$

7. a) Arithmetic

b) $f(x) = f(x-1) + 1$; $f(1) = -5$

c) $f(x) = x - 6$

9. a) Arithmetic

b) $f(x) = f(x-1) + 22$; $f(5) = 11$

c) $f(x) = 22x - 99$

11. a) Arithmetic

b) $f(x) = f(x-1) + 1$; $f(-6) = 2$

c) $f(x) = x + 8$

13. a) Geometric

b) $f(x) = f(x-1) \cdot \dfrac{1}{2}$; $f(0) = 4$

c) $f(x) = 4 \cdot \left(\dfrac{1}{2} \right)^{x}$

15. $f(0) = 2/7$

$f(1) = 2$

$f(2) = 14$

$f(3) = 98$

$f(4) = 686$

$f(5) = 4802$

17. $f(1) = 6$
    $f(2) = 12$
    $f(3) = 24$
    $f(4) = 48$
    $f(5) = 96$
    $f(6) = 192$

19. $f(1) = 8$
    $f(2) = 22$
    $f(3) = 50$
    $f(4) = 106$
    $f(5) = 218$
    $f(6) = 442$

21. $f(1) = 2$
    $f(2) = 10$
    $f(3) = 34$
    $f(4) = 106$
    $f(5) = 322$
    $f(6) = 970$