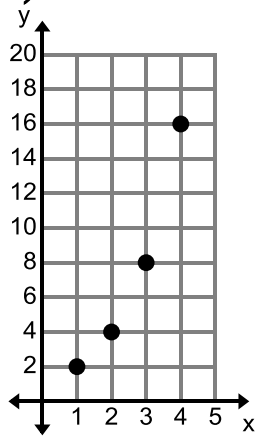
HW 3.3 Selected Answers Sec 1 H

1. a) $f(x) = f(x-1) \cdot 2;\ f(1) = 2$

b) $f(x) = 2 \cdot 2^{x-1}$

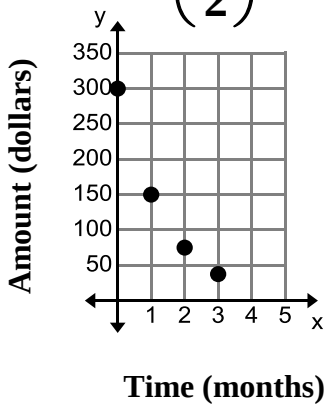
c)



3. a) $f(x) = f(x-1) \cdot \frac{1}{2};\ f(0) = 300$

b) $f(x) = 300 \cdot \left(\frac{1}{2}\right)^x$

c)



5. a) 5

b) $f(x) = f(x-1) \cdot 5;\ f(1) = 2$

c) $f(x) = 2 \cdot 5^{x-1}$

7. a) 3

b) $f(x) = f(x-1) \cdot 3;\ f(1) = 4$

c) $f(x) = 4 \cdot 3^{x-1}$

9. a) 7

b) $f(x) = f(x-1) \cdot 7;\ f(1) = -6$

c) $f(x) = -6 \cdot 7^{x-1}$

11. a) 5

b) $f(x) = f(x-1) \cdot 5;\ f(1) = 3$

c) $f(x) = 3 \cdot 5^{x-1}$

13. a) 8

b) $f(x) = f(x-1) \cdot 8;\ f(1) = 4$

c) $f(x) = 4 \cdot 8^{x-1}$

15. a) 6

b) $f(x) = f(x-1) \cdot 6;\ f(1) = -6$

c) $f(x) = -6 \cdot 6^{x-1}$

17. $f(x) = 4 \cdot 2^{x-1}$

4096

19. $f(x) = \frac{2}{625} \cdot 5^{x-1}$

50

21. $f(x) = 3 \cdot 7^{x-1}$

2,470,629

23. $f(x) = 3 \cdot 2^{x-1}$

12,288