

10.2

a)  $f(n) = 7n$

$$f(0) = 0$$

$$f(n+1) = f(n) + 7$$

$$f(1) = f(0) + 7 = 7$$

$$f(2) = f(1) + 7 = 14$$

$$\vdots$$

$$f(8) = f(7) + 7$$

b)  $f(n) = 2n + 1$

$$f(0) = 1$$

$$f(n+1) = 2f(n) + 1$$

$$f(1) = 2 \cdot f(0) + 1$$

$$\vdots$$

$$f(8) = 2 \cdot f(7) + 1$$

c)  ~~$f(0) = 1$~~   $f(0) = 1$

$$f(n) = 10^n$$

$$f(n+1) = 10 \cdot f(n)$$

$$f(1) = 10f(0)$$

$$f(2) = 10f(1)$$

$$\vdots$$

$$f(8) = 10f(7)$$