> M = CROC

Given the recursive equation, find the explicit equation.

Ex. 1:
$$f(x) = f(x-1) + 2$$
; $f(0) = -3$ $f(x) = mx + 6$

Ex. 2:
$$f(x) = f(x-1)-8$$
; $f(-3) = 4$
 $f(x) = -8x - 20$
 $y = mx + b$
 $y = (-8)(-3) + b$

Given the explicit equation, find the recursive equation.

Ex. 3:
$$f(x) = 4x + 9 \rightarrow y - int, x = 0$$

 $f(x) = f(x-1) + 4 = f(0) = 9$

Ex. 4:
$$f(x) = -4(x-2)+3$$

 $-4 \times +8+3$
 $f(x) = -4 \times +11$

$$f(x)=f(x-1)-45$$

 $f(0)=11$

Given the recursive equation, find the explicit equation.

Ex. 5:
$$f(x) = f(x-1) \cdot 4$$
; $f(\frac{1}{x}) = \frac{-6}{x}$

$$f(x) = \frac{-1}{x} \quad (common) \quad (comm$$

Ex. 6:
$$f(x) = 6 \circ f(x-1)$$
; $f(-4) = -2$
 $f(x) = -2$

Given the explicit equation, find the recursive equation.

Ex. 7:
$$f(x) = -2 \cdot \left(\frac{1}{7}\right)^{x-1}$$

 $f(x) = f(x-1) \cdot \frac{1}{7} \cdot f(1) = -2$
Ex. 8: $f(x) = 3(5)^{x+5}$

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

Ex. 9:

Table:	Day	Profit	\$	Graph:	•	Day 5	JS	lū	
	X 0 1 2 3	f(x) -100 -90 -80 -70	3	X stitled (***

Recursive Equation:

$$f(x) = f(x-1) + 10 ; f(0) = -100$$
 $f(x) = 10x - 100$

Explicit Equation:

$$f(x) = 10x - 100$$

Create a Context:

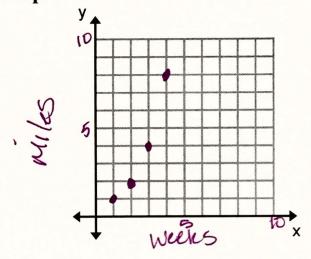
Johnny wants to start a business. He has to borrow \$100 from his mom to start off. He is going to make \$10 each day.

Ex. 10:

T	a	b	l	e	:

weeks	Miles
Χ	f(x)
1	1
2	2
3	4
4	8

Graph:



Recursive Equation:

Explicit Equation:

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

Create a Context:

Scott decides to add running to his exercise routine and runs a total of one miles his first week. He plans to double the number of miles he runs each week.