

\* BE AWARE USUALLY THE FIRST # IS  $u_1$

Name: \_\_\_\_\_  
Period: \_\_\_\_\_

ANSWERS

Sequence	Table	Recursive Formula	Graph	Linear Equation	Explicit Formula										
$2, 5, 8, 11, \dots$	<table border="1"> <tr><td><math>n</math></td><td>0</td><td>1</td><td>2</td><td>3</td></tr> <tr><td><math>a_n</math></td><td>2</td><td>5</td><td>8</td><td>11</td></tr> </table>	$n$	0	1	2	3	$a_n$	2	5	8	11	$u_0 = 2$ $u_n = u_{n-1} + 3$ $n \geq 1$ <hr/> $u_1 = 5$ $u_n = u_{n-1} + 3$ $n \geq 2$		$y = 2 + 3x$ continuous all #s	$u_n = 2 + 3n$ starts w/ zero discrete
$n$	0	1	2	3											
$a_n$	2	5	8	11											
$12, 9, 6, 3, \dots$	<table border="1"> <tr><td><math>n</math></td><td>0</td><td>1</td><td>2</td><td>3</td></tr> <tr><td><math>a_n</math></td><td>12</td><td>9</td><td>6</td><td>3</td></tr> </table>	$n$	0	1	2	3	$a_n$	12	9	6	3	$u_1 = 9$ $u_n = u_{n-1} - 3$ $n \geq 2$		$y = 12 - 3x$	$u_n = 12 - 3n$
$n$	0	1	2	3											
$a_n$	12	9	6	3											
$-7, -3, 1, 5, \dots$	<table border="1"> <tr><td><math>n</math></td><td>0</td><td>1</td><td>2</td><td>3</td></tr> <tr><td><math>a_n</math></td><td>-7</td><td>-3</td><td>1</td><td>5</td></tr> </table>	$n$	0	1	2	3	$a_n$	-7	-3	1	5	$u_0 = -7$ $u_n = u_{n-1} + 4$ $n \geq 1$		$y = 4x - 7$	$u_n = -7 + 4n$
$n$	0	1	2	3											
$a_n$	-7	-3	1	5											

Sequence	Table	Recursive Formula	Graph	Linear Equation	Explicit Formula										
-5, -1, 9, -11, ...	<table border="1"> <tr><td>n</td><td>0</td><td>1</td><td>2</td><td>3</td></tr> <tr><td><math>a_n</math></td><td>-3</td><td>-5</td><td>-7</td><td>-9</td></tr> </table> $\sqrt{-2}$ $\sqrt{-2}$ $\sqrt{-2}$	n	0	1	2	3	$a_n$	-3	-5	-7	-9	$a_0 = -3$ $a_n = a_{n-1} - 2$ $n \geq 1$		$y = mx + b$ $y = -2x + 3$ slope $\downarrow$ c.d. $\uparrow$ y-int. $\uparrow$	$-3 + n(-2) = a_n$ $-3 - 2n = a_n$ $n \geq 1$ discrete, x-value negativ
n	0	1	2	3											
$a_n$	-3	-5	-7	-9											
-11, -6, -1, 4, ...	<table border="1"> <tr><td>n</td><td>0</td><td>1</td><td>2</td><td>3</td></tr> <tr><td><math>a_n</math></td><td>-11</td><td>-6</td><td>-1</td><td>4</td></tr> </table>	n	0	1	2	3	$a_n$	-11	-6	-1	4	$a_0 = -11$ $a_n = a_{n-1} + 5$ $n \geq 1$		$y = 5x - 11$	$a_n = -11 + 5n$ $n \geq 1$
n	0	1	2	3											
$a_n$	-11	-6	-1	4											