

difference

Recursive

Explicit

$$a_1 = \text{---}$$

$$a_n = a_1 + (n-1)d$$

$$a_n = a_{n-1} + d$$

a_{n-1} = previous term

a. yes ; $d = 4$; 13

b. yes ; $d = 17$; 73

c. no

d. yes ; $d = -7$; -16

Ex 2

-5, -2, 1, 4

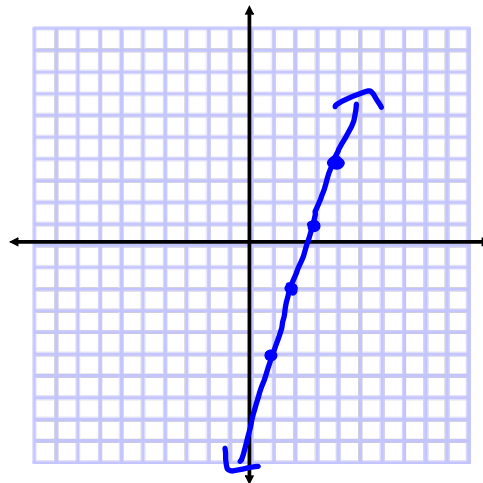
$$a_1 = -5$$

$$a_2 = -2$$

$$a_3 = 1$$

$$a_4 = 4$$

x	y
1	-5
2	-2
3	1
4	4



a.) -11, -6, -1, 4, 9

$$d = 5$$

$$a_1 = -11$$

Recursive

Explicit

$$a_1 = -11$$

$$a_n = a_{n-1} + 5$$

$$a_n = -11 + (n-1)5$$

$$a_n = -11 + 5n - 5$$

$$a_n = 5n - 16$$

b) 4, 13, 22, 31, 40

$d = 9$

$a_1 = 4$

Recursive

Explicit

$a_1 = 4$
 $a_n = a_{n-1} + 9$

$a_n = 4 + (n-1)9$

$a_n = 4 + 9n - 9$

$a_n = 9n - 5$

c) 8, 6, 4, 2, 0, -2

$d = -2$ $a_1 = 8$

Recursive

Explicit

$a_1 = 8$
 $a_n = a_{n-1} - 2$

$a_n = 8 + (n-1)-2$

$a_n = 8 - 2n + 2$

$a_n = -2n + 10$

1.

x	y
1	10
2	20
3	30
4	

a. add 10

b. 40

c. $a_1 = 10$

$a_n = a_{n-1} + 10$

d. $a_n = 10 + (n-1)10$

$a_n = 10 + 10n - 10$

$a_n = 10n$