

Going over p. 739 $a_1 = 7$

39. 25 rows $d = 2$
 $a_n = 7 + (n-1)2$

7

9

11

$$a_n = 7 + 2n - 2$$

$$a_n = 2n + 5$$

$$S_{25} = \frac{25}{2}(7+55)$$

$$a_{25} = 2(25) + 5$$

$$S_n = \frac{n}{2}(a_1 + \underline{\underline{a_n}})$$

$$a_{25} = 55$$

21

d
 a_{10}
recur
exp.

6, 10, 14, 18, 22, ...
+4

$$d = 4$$

$$\Rightarrow a_{n+1} = a_n + 4$$

$$\Rightarrow a_n = a_{n-1} + 4$$

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

$$a_n = 6 + (n-1)4$$

$$a_n = 4n + 2$$

$$a_{10} = 4(10) + 2$$

$$a_{10} = 42$$

25.

$$a_1 = -20$$

$$a_2 = -16$$

$$a_3 = -12$$

$$a_4 = -8$$

$$a_7 = 4$$

a_1

a_n

$$a_n = a_1 + (n-1)d \quad d = \frac{4+8}{7-4} = \frac{12}{3} = 4$$

$$a_n = a_1 + (n-1)4$$

$$4 = a_1 + (7-1)4$$

$$4 = a_1 + 24$$

$$-20 = a_1$$

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