

1.

0	35	
1		
2		
3	3	→ 24
4		
5	12	→ 5
6		

2.

0	35	
1		
2		
3	3	
4	24	
5	12	
6	5	

3.

0	35	→ 24
1		
2	5	
3	3	
4		
5	12	
6		

4. $f(n) - f(n-1) = 3n$.

$$f(n-1) - f(n-2) = 3(n-1)$$

$$\vdots$$

$$f(1) - f(0) = 3$$

$$f(n) - f(0) = 3[n + (n-1) + \dots + 1]$$

$$f(n) = 3 \cdot \frac{n(n+1)}{2} + 7$$

$$= \frac{3}{2}n^2 + \frac{3}{2}n + 7$$

5. ??) $r \rightarrow \text{level } 1 [1] \rightarrow \text{level } 2 [2] \rightarrow \text{level } 3$.