

2.86
rd

-6, 1, 15, 36, ...

(*) 7, 14, 21, ...

$$a_n = a_1 + S_{n-1}$$

$$a_n = -6 + \frac{n-1}{2} [14 + 7(n-2)] = -6 + \frac{n-1}{2} (7n) = \frac{7n^2 - 7n - 12}{2}$$

$$729 = \frac{7n^2 - 7n - 12}{2} \rightarrow 1458 = 7n^2 - 7n - 12$$

$$0 = 7n^2 - 7n - 1470 \quad | :7$$

$$0 = n^2 - n - 210$$

$$\boxed{n=15}$$

$$n=14$$